European Union 7\textsuperscript{th} Framework Programme:

Opportunities for Researchers from the Socio-economic Sciences and Humanities

Analysis of SSH Relevant Topics in Areas other than Theme 8 Socio-economic Sciences and Humanities

Work Programmes 2011

Author: Seda Göksu, TUBITAK

Date: August 2010

© 2010 NET4SOCIETY
All rights reserved
Reproduction only with written consent by the coordinator

NET4SOCIETY is an FP7 project funded by the EUROPEAN COMMISSION

This publication reflects only the author’s views – the Community is not liable for any use that may be made of the information contained therein.
Introduction .................................................................................................................................................. 5

1. Cooperation Specific Programme ........................................................................................................... 6

1. SSH Relevant Topics in the Health Work Programme ............................................................................ 6

HEALTH.2011.3.3-3: Developing and implementing methods for the transfer of research into policy in the fields of health promotion and disease prevention. FP7-HEALTH-2011-single-stage ................. 6

HEALTH.2011.3.3-4: A road-map for mental health research in Europe. FP7-HEALTH-2011-single-stage. ............................................................................................................................................... 6

HEALTH.2011.3.4-2: Building sustainable capacity for research for health and its social determinants in low and middle income countries. FP7-HEALTH-2011-single-stage ......................................................... 7

HEALTH.2011.3.4-3: Multilateral cooperation between Europe, Africa and Latin America on public health and health services research. FP7-HEALTH-2011-single-stage ......................................................... 7

HEALTH.2011.4.1-1: Networking of major research institutions to coordinate communication actions aimed at the media and the general public. FP7-HEALTH-2011-single-stage ........................................................................................................................................... 7

HEALTH.2011.4.1-4: Organisation of supporting actions and events related to the Presidency of the European Union. Call: FP7-HEALTH-2011-single-stage ........................................................................................................................................ 8

HEALTH.2011.2.3.3-3: Development of an evidence-based behavioural and communication package to respond to major epidemic outbreaks. FP7-HEALTH-2011-two-stage ................................................................................................................................. 8

HEALTH.3.3-1: Developing methodologies to reduce inequities in the determinants of health. FP7-HEALTH-2011-two-stage. ........................................................................................................................................ 8

HEALTH.3.3-2: Analysis of integrated strategies for sustainable behaviour change. FP7-HEALTH- 2011-two-stage. ........................................................................................................................................ 9

2. SSH Relevant Topics in the KBBE Work Programme ................................................................................. 9

KBBE.2011.1.2-01: Sustainable management of agricultural soils in Europe for enhancing food and feed production and contributing to climate change mitigation Call: FP7-KBBE-2011-5 ........................................................................................................................................ 10

KBBE.2011.1.2-07: Preserving the multi functionality of European Mountain forests Call: FP7-KBBE-2011-5 ........................................................................................................................................ 10


KBBE.2011.1.2-12: Role of aquaculture in improving food security and eradicating poverty worldwide. Call: FP7-KBBE-2011-5 ........................................................................................................................................ 11


KBBE.2011.1.4-04: The CAP and landscape management Call: FP7-KBBE-2011-5 ........................................................................................................................................ 13

KBBE.2011.1.4-06: Towards land management of tomorrow – Innovative forms of mixed farming for optimized use of energy and nutrients. Call: FP7-KBBE-2011-5 ........................................................................................................................................ 13

KBBE.2011.2.1-01: Strategies for improving communication between social and consumer scientists, food technology developers and consumers. Call: FP7-KBBE-2011-5 ........................................................................................................................................ 14

KBBE.2011.2.2-04: Translation mechanisms for targeting interventions on micronutrients – Mandatory South Asia. Call: FP7-KBBE-2011-5 ........................................................................................................................................ 14

3. SSH Relevant Topics in the Information & Communication technologies Work Programme 15

Objective ICT-2011.1.4 Trustworthy ICT ........................................................................................................ 15

Objective ICT-2011.4.2 – Language Technologies .......................................................................................... 16

Objective ICT-2011.5.4 ICT for Ageing and Wellbeing .................................................................................. 17

Objective ICT-2011.5.5 ICT for smart and personalised inclusion ................................................................. 18

Objective ICT-2011.6.7 Cooperative Systems for energy efficient and sustainable ........................................ 20

mobility ......................................................................................................................................................... 20

FET Proactive scheme: tackling targeted transformative research and exploring new large-scale scientific challenges and cooperation models ............................................................................... 20

4. SSH Relevant Topics in the Nanosciences, nanotechnologies, materials & new production technologies Work Programme ....................................................................................................................................... 22

NMP.2011.1.3-4 European Platform on Nano Outreach and Dialogue (NODE) ........................................................................................................................................ 22
5. SSH Relevant Topics in the Energy Work Programme .................................................. 23
   There is no related topic under the current Energy call ........................................... 23

6. SSH Relevant Topics in the Environment Work Programme ........................................ 24
   ENV.2011.1.6-2 Mitigation policies and measures in the world's major economies compatible with the objective of limiting global surface temperature increase below 2°C .................................. 24
   ENV.2011.1.2.2-1 Combined exposures to environmental agents: integrated .......................... 24
   approaches to evaluate environment-health relationships in children .......................... 24
   ENV.2011.1.3.2-1 Building societal resilience to disasters in Europe ................................. 25
   ENV.2011.2.1.5-1 Sustainable and Resilient Green Cities ............................................... 25
   ENV.2011.2.1.5-2 Furthering Strategic Urban Research .................................................. 25
   ENV.2011.4.2.1-1 Efficiency assessment of environmental policy tools related to sustainability .. 25
   ENV.2011.4.2.2-1 Knowledge brokerage activities for engaging in a "beyond GDP" society .... 26
   ENV.2011.4.2.3-1 Community based management of environmental challenges ............... 26
   ENV.2011.4.2.3-2 Sustainable Consumption and Production at the heart of green growth ...... 27

7. SSH Relevant Topics in the Transport Work Programme ............................................. 28
   TPT.2011.1-1 Enhancing connectivity between research solutions and policy-making for the sustainable development of Transport ................................................................. 28
   TPT.2011.1-2 Transport needs for an ageing society ...................................................... 29
   TPT.2011.1-3 Socio-economic challenges for breakthrough innovations in European freight transport .......................................................................................................................... 29
   TPT.2011.2-1 Integration of passenger transport modes and travel information services through the analysis of social behaviour, mobility patterns and business models as basis for the decarbonization of the European transport system ................................................................. 30
   TPT.2011.2-2 Enhanced cross-fertilization and synergies in research actions dealing with safety aspects .......................................................................................................................... 30
   TPT.2011.2-3 Modelling of co-modality quick-wins: Roadmap towards co-modality ........... 31

8. SSH Relevant Topics in the Space Work Programme .................................................... 32
   SPA.2011.3. 5-01 European Space Policy Studies .......................................................... 32

9. SSH Relevant Topics in the Security Work Programme .................................................. 33
   Topic SEC-2011.6.1-1 Analysis of the security systems in Europe ................................. 33
   Topic SEC-2011.6.1-2 Protection of European citizens abroad ........................................ 33
   Topic SEC-2011.6.1-3 Signs of ’early warning’ to detect trends and weak signals in ............. 33
   social polarisation, violent radicalisation development and segregation ........................ 33
   Topic SEC-2011.6.1-4 Reduction of the cognitive biases in intelligence analysis ............. 34
   Topic FP7-SEC-2011.6.1-5 Surveillance and the challenges for the security of the............. 34
   citizen(coordinated with the topic SSH.2011.5.1-227 Surveillance and the challenges for democracy and an open society of the 2011 SSH Work Programme.) ............................................. 34
   Topic SEC-2011.6.2-1 Best practices for enhancing security policy in urban zones ........... 35
   Topic SEC-2011.6.3-1 Assessing trends and threats in a society ..................................... 35
   Topic SEC-2011.6.4-1 Develop socio-economic methodologies which can be adapted ....... 35
   to different missions in security research .................................................................. 35
   Topic SEC-2011.6.5-1 Conflict resolution and mediation ................................................. 36
   Topic SEC-2011.6.5-2 The relationship between Human privacy and security ................. 36
   JOINT CALL: THE OCEAN OF TOMORROW (KBBE, ENERGY, ENVIRONMENT, TRANSPORT) ................................................................. 37

OCEAN.2011-3: Assessing and predicting the combined effects of natural and human-made pressures in the Mediterranean and the Black Sea in view of their better governance Call: FP7-OCEAN-2011.37
OCEAN.2011-4: Knowledge-base and tools for regional networks of MPAs, integrated management of activities together with assessment of wind energy potential in the Mediterranean and the Black Sea Call: FP7-OCEAN-2011 ................................................................. 38

II. Ideas Specific Programme ................................................................................. 40

ERC Starting Independent Researcher Grant and ERC Advanced Investigators Grant ...... 40

SH 1 Individuals, institutions and markets: economics, finance and management ........ 40

Published by: TUBITAK / NET4SOCIETY
Version: August 2010
SH 2 Institutions, values, beliefs and behavior: sociology, social anthropology, political science, law, communication, social studies of science and technology .......................................................... 41
SH 3 Environment and Society: environmental studies, demography, social geography, urban and regional studies ........................................................................................................... 41
SH 4 The Human mind and its complexity: cognition, psychology, linguistics, philosophy and education .............................................................................................................. 41
SH 5 Cultures and cultural production: literature, visual and performing arts, music, culture, and comparative studies ...................................................................................... 42
SH 6 The Study of the human past: archaeology, history and memory ................................................. 42
III. People Specific Programme ....................................................................................................... 43
Activity 1: Initial training of researchers to improve mostly young researchers ................................. 43
Activity 2: Life-long training and career development ...................................................................... 43
Activity 3: Industry-academia partnerships and pathways ................................................................. 43
Activity 4: International dimension ................................................................................................. 44
Activity 5: Researchers' Night ......................................................................................................... 44
IV. Capacities Specific Programme .................................................................................................. 45
1. SSH Relevant Topics in the Research Infrastructures Work Programme ........................................ 45
INFRA-2011-1.1.1. Language Resources and Tools for cross-disciplinary research in social sciences and humanities ........................................................................................................ 45
INFRA-2011-1.1.2. European Data Infrastructure for multidisciplinary research in the socio-economic behaviour of individuals and households, related to sustainability policy, climate change policy and environmental risk ........................................................................................................ 45
INFRA-2011-1.1.3. Integrating Digital Archives and Resources for Research on Medieval and Modern European History ................................................................................................. 45
INFRA-2011-1.1.4. Integrating Archives for research on Contemporary European Social History ....... 46
1.1.2 Construction of new infrastructures (or major upgrades) - preparatory phase ......................... 46
2. SSH Relevant Topics in the Research for the benefit of SMEs Work Programme ......................... 48
This call is open to all research fields. Therefore there are no specific topics mentioned here. Please consult the Work Programme ........................................................................................... 48
3. SSH Relevant Topics in the Research Potential of Convergence Regions Work Programme ......... 49
This call is open to all research fields. Therefore there are no specific topics mentioned here. Please consult the Work Programme ........................................................................................... 49
4. SSH Relevant Topics in the Regions of Knowledge Work Programme .......................................... 50
Topic: REGIONS-2011-1 ............................................................................................................... 50
5. SSH Relevant Topics in the Science in Society Work Programme ............................................... 52
SiS.2011.1.0-1 Mobilisation and Mutual Learning (MML) Action Plans on societal challenges .......... 52
SiS.2011.1.1.1-1: Involvement of civil society organisations in research ........................................ 54
SiS.2011.1.1.1-5 A Forward Look at new ways of doing and organising research in our knowledge societies .................................................................................................................. 55
SiS.2011.1.3.1-1 Reinforcing European strategies on access, dissemination and preservation of scientific information in the digital age ........................................................................... 56
SiS.2011.1.3.4-1 Clusters of cities of scientific culture for innovation .............................................. 56
SiS.2011.2.1.1-Implementing structural change in research organisations/universities ................... 57
SiS.2011.2.2.1-1 Supporting and coordinating actions on innovative methods in science education: teacher training on inquiry based teaching methods on a large scale in Europe ......................... 59
SiS.2011.2.2.3-1 Science and mathematics related activities carried out in pre-school and in the first years of primary schools: their link to the development of creative skills. .......................... 60
SiS.2011.2.2.3-2 European events to bring together young researchers with distinguished scientists as role models .............................................................................................................. 61
SiS.2011.3.0.6-1 Science-Society interaction in the digital technologies era ...................................... 61

Published by: TUBITAK / NET4SOCIETY
Version: August 2010
6. SSH Relevant Topics in the International Cooperation (INCO) .................................................. 63
Activity 7.6 Reinforcing cooperation with Europe's neighbours in the context of the ERA (FP7-INCO-2011-6, ERA-WIDE) .......................................................... 63
Introduction

“Opportunities” is a document compiled within task 2.3, “Networking the networks” in the frame of the EU-financed project “NET4SOCIETY – Trans-national co-operation among National Contact Points for Social-economic sciences and the Humanities”. It wants to make researchers from the socio-economic sciences and humanities who are familiar with Theme 8 “Socio-economic Sciences and Humanities” aware that there are indeed opportunities for socio-economic research and humanities research in all the other areas of the 7th European Research Framework Programme (FP7).

Find here topics extracted from the four specific programmes of FP7: Cooperation, Ideas, People and Capacities which researchers from socio-economic sciences and humanities might find of interest. Not all topics that mention SSH related subjects or themes are included, but only those that contain SSH related themes with strong relevance (compared with marginal relevance) to the SSH community. This is not an ‘all inclusive’ but a ‘targeted’ approach. This document includes the SSH relevant topics in FP7 calls opened in the period of July 2010.

Since, in line with the relevance criterion mentioned above, this document does not list all SSH relevant topics in the FP7 specific programmes, researchers are strongly advised to screen the Work Programmes themselves in order not to lose out on research opportunities offered to their specific interest. Also, 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. Of special importance are budget thresholds and funding schemes. These and any other relevant information can be found in the specific Work Programme and in the Guide for Applicants. On CORDIS all the relevant documents can be downloaded on the page dedicated to open calls.

This analysis of SSH relevant topics in other thematic areas of FP7 will be updated following the publications of new calls in the specific programmes of FP7.
SSH Relevant Topics in FP7 Areas other than Theme 8 Socio-economic Sciences and Humanities

I. Cooperation Specific Programme
1. SSH Relevant Topics in the Health Work Programme

Work Programme 2011 (Open Call)

<table>
<thead>
<tr>
<th>Call identifier: FP7-HEALTH-2011-single-stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of publication: 20 July 2010</td>
</tr>
<tr>
<td>Proposal submission and evaluation: Single-stage procedure</td>
</tr>
<tr>
<td>Deadline: 10 November 2010 at 17:00:00 (Brussels local time)</td>
</tr>
<tr>
<td>Indicative budget: EUR 160.5 Million</td>
</tr>
</tbody>
</table>

HEALTH.2011.3.3-3: Developing and implementing methods for the transfer of research into policy in the fields of health promotion and disease prevention. FP7-HEALTH-2011-single-stage.

Public health research in Europe has produced considerable evidence supporting health promotion and disease prevention. The successful project under this topic should support the knowledge translation of research findings and results for health promotion and disease prevention to improve the impact of EU-funded research.2

FP7 Cooperation Work Programme: Health-2011 should be to develop and assess innovative integrative approaches employing evidence informed policy-making methods, by reaching out to relevant projects, linking research findings and results to relevant policy makers and other stakeholders that include feedback loops. The processes of identifying needs for research evidence, finding and assessing such research evidence and the pathways to bring such evidence into decision-making practices should be taken into account. The issue of insufficient research evidence should be addressed and, due to the experimental nature of this research, the design needs to include an in-built monitoring and evaluation process that documents and critically analyses the impact and other important aspects of the chosen approach as well as the policies themselves. The timeframe should span a 5 year period, taking into account projects selected in future calls addressing health promotion and disease prevention40. Note: Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.

HEALTH.2011.3.3-4: A road-map for mental health research in Europe. FP7-HEALTH-2011-single-stage.

The aim should be to address a coordinated and comprehensive approach to promote and integrate research on the biological, epidemiological, social and public health aspects of

1 For more information please see the Health webpage.

mental health and well being in Europe. Member States' existing research programmes are to be examined, recent advances as well as the identification of gaps in knowledge taken into account and potential roadmaps for the future of mental health research in Europe to be developed, set within a life course perspective. **Note**: Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.

**HEALTH.2011.3.4-2: Building sustainable capacity for research for health and its social determinants in low and & middle income countries. FP7-HEALTH-2011-single-stage.**

The Coordination Action should develop and implement a concept for the sustainable development of capacity for research for health and its social determinants in close collaboration with institutions in ICPC countries and a substantial element of South-South cooperation. Topical areas to be covered should be identified through a training needs assessment with all stakeholders as part of the project and may include – among others – epidemiology and demography, health economics, environmental health, evaluation sciences, medical anthropology, and community-based health care. Interdisciplinary courses may also be considered. Emphasis should be given to establishing and supporting excellent academic teaching and research networks. Active participation of young researchers in regional and international fora, as well as exchange between research institutions, could be considered. The aim is to achieve a balanced level of participation for ICPC countries. **Note**: Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.

**HEALTH.2011.3.4-3: Multilateral cooperation between Europe, Africa and Latin America on public health and health services research. FP7-HEALTH-2011-single-stage.**

This Coordination Action is aimed at creating links between "North-South" and "South-South" efforts in addressing health inequalities in developing countries. It should map and analyse current and planned activities and strategies in order to provide evidence on best practice and policy advice for the development of future interventions and programmes in this area. Furthermore, the project should identify further research needs and pay – among others – attention to health inequalities affecting children, adolescents and mothers (families). The EU grant shall cover the participation of the European, African and Latin American partners other than partners from Brazil. The cooperation with a complementary future coordinating action from Brazil will be an obligation. This complementary action of Brazilian and possible additional African partners is expected to be covered through funds from the Brazilian side through a complementary call on the same topic. Participation of other countries with substantial health services cooperation with Africa is welcomed. **Note**: Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.

**HEALTH.2011.4.1-1: Networking of major research institutions to coordinate communication actions aimed at the media and the general public. FP7-HEALTH-2011-single-stage.**

The objective is to network major research institutions and the commission services to coordinate their communication actions regarding EU-funded research in order that their actions have a greater impact on its visibility in the general public. Proposals should include the collection, sharing and distribution of information about research results in a timely way through multilingual, communication oriented information networks a coordinated,
multinational press and public relations strategy on research emanating from EU-funded projects, and the adaptation of the contents/language/media to relevant target audiences. The potential applications and benefits for the citizens should be particularly highlighted. Successful applications should involve or coordinate a sufficient critical mass of communication services from research institutions and SME organisations in different countries participating in EU-funded health research projects. Some examples of activities could include the generation and efficient distribution of press kits for journalists from general and specialised media, a multipartner coordination and repository of press releases, 'wiki' pages of projects, databases of scientific images, early alert system about communicable project results among partner institutions and to the Commission, newsletters, etc. **Note:** Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.

**HEALTH.2011.4.1-4:** Organisation of supporting actions and events related to the Presidency of the European Union. **FP7-HEALTH-2011-single-stage.**

An integral part of the Health Theme's activity is to organise, together with successive EU presidencies, events of a strategic nature. The proposed Support Action(s) should contribute to conferences or other appropriate events to be held in a Member State which will hold a forthcoming Presidency of the European Union, specifically 2012 and 2013 Presidencies, in any area of the Health Theme. In order to ensure high political and strategic relevance, the active involvement of the competent National Authority(ies) will be evaluated under criteria 'Quality' and 'Impact'. The proposed Support Action(s) should address priorities that are of high relevance at the date of its taking place. An appropriate equilibrium should be present in the proposed action(s), with balanced presentation of various research, societal and industrial elements and points of view. Participation of non-EU stakeholders is possible. Outreach activities may be included such as *e.g.* a press programme and/or an event dedicated to raising awareness on a specific topic in schools. **Note:** Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.

**Call identifier:** FP7-HEALTH-2011-two-stage

**Date of publication:** 20 July 2010

**Proposal submission and evaluation:** two-stage procedure

**Deadline for stage 1 proposals:** 13 October 2010 at 17:00:00 (Brussels local time)

**Indicative budget:** EUR Million 498

**HEALTH.2011.2.3.3-3:** Development of an evidence-based behavioural and communication package to respond to major epidemic outbreaks. **FP7-HEALTH-2011-two-stage.**

Research should focus on behavioural research and how human behaviour influences disease transmission, vaccine acceptance and antiviral therapy acceptance in the general population in a crisis situation. Research should focus on developing appropriate communication methods, especially regarding complicated messages and advice based on uncertainties, a changing epidemiological picture and information gaps. Particular attention should be paid to addressing knowledge and attitudes towards vaccination for a better understanding of the level of acceptable risk in vaccination in relation to the perceived risk of disease. The project should develop and test strategies to support vaccine uptake with
special focus on new communication strategies for health professionals/agencies to engage with vaccine-resistant groups. The objective is to set up an integrated research project involving social sciences, behavioural sciences, communication, media expertise and civil society. **Note:** Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.

**HEALTH.3.3-1: Developing methodologies to reduce inequities in the determinants of health. FP7-HEALTH-2011-two-stage.**

Research should identify and evaluate policy and programme interventions with the potential to reduce inequities in the determinants of health and health services and opportunities to transfer the findings of research to potential users with maximum effectiveness. Proposals could address the strategic drivers of reductions in health disparities, the differential health effects of policy interventions, and the impact of alternative options for enhancing equity. They could also identify and validate innovative research methodologies to evaluate 'natural policy experiments' in which the introduction of a specific policy provides the opportunity for a quasi-experimental design or a comparative analysis that can be used to identify the policy's impact on different social groups including vulnerable groups (e.g. changes in social security systems; national responses to financial crisis; health equity assessments of urban renewal initiatives). Methodologies to generate, assess, and classify scientific evidence on the effectiveness including replication of complex or system-oriented interventions could be developed. Research is further needed on how people most affected by social determinants of health can be most effectively involved in the design, implementation, and evaluation of research methods. **Note:** Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.

**HEALTH.3.3-2: Analysis of integrated strategies for sustainable behaviour change. FP7-HEALTH-2011-two-stage.**

The aim is to define generalisable, effective, and sustainable behaviour change interventions that can be effectively translated into health promotion practice. Research on behaviour change in its widest sense is called for. Multi-level intervention approaches that integrate individual, community, organisational, and societal systems should be analysed with respect to their effectiveness and the relevant context variables recognizing the wide range of influences on individuals and behaviours. **Note:** Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria.
2. SSH Relevant Topics in the KBBE\(^3\) Work Programme

<table>
<thead>
<tr>
<th>Call identifier: FP7-KBBE-2011-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of publication: 20 July 2010</td>
</tr>
<tr>
<td>Deadline: 25 January 2011 at 17.00 Brussels local time</td>
</tr>
<tr>
<td>Indicative budget: EUR 240.27</td>
</tr>
</tbody>
</table>

**KBBE.2011.1.2-01: Sustainable management of agricultural soils in Europe for enhancing food and feed production and contributing to climate change mitigation**

Call: FP7-KBBE-2011-5

If properly managed, agricultural soils can enhance farm productivity and also contribute to climate change mitigation by providing carbon sequestration opportunities. The project will explore the complexity of agricultural soils in a novel and truly integrated interdisciplinary perspective, to ensure a holistic approach and genuine collaboration between relevant scientific domains, such as agronomy, agro-ecology, microbiology, plant sciences, soil sciences and socio-economic sciences. A well integrated interdisciplinary approach will help firstly to better understand the complex and dynamic nature of agricultural soil ecosystems, including soil and plant health related aspects, secondly, to improve farming practices and farm land uses for increasing productivity, and finally, to enhance carbon sequestration capacity, thus limiting the environmental impact of agriculture in terms of GHG emissions. Taking into account the diverse agricultural soil types across Europe, and with the overall objective of identifying suitable soil and crop management practices to increase yields and keep soil fertility, the project will combine modelling and field experimentation and will privilege holistic approaches to unveil, capture and harness the complexity of crop/soil relations in different farming systems, from intensive to low-input and organic farming. The proposed research should facilitate the exchange of experiences and information between all involved actors from the different disciplines, and help better plan and analyse future scenarios with a view to the expected medium and long-term climate change impact on crop production in Europe. In addition, effective dissemination actions and strategies should be proposed to speed up new knowledge and novel practices transfer towards different categories of beneficiaries, e.g. farmers, extension services and policy-makers.

**KBBE.2011.1.2-07: Preserving the multi functionality of European Mountain forests**

Call: FP7-KBBE-2011-5

Besides producing economic goods as well as delivering important societal and ecological services, forests in Europe's high mountains store vast amounts of carbon in old trees, deadwood and soils. Mountain forests are especially sensitive to climate change and significant alterations in the potential distribution of species are projected for the future. Higher temperatures and changes in snowfall patterns will also make mountain forests more vulnerable to pests and diseases. Under these increasing pressures, there is a need to assist mountain communities in managing adequately their forests to meet the various demands coming from socio-economic activities (e.g. feeding sawmills, bio-energy and recreation), environmental protection (e.g. conservation of biodiversity and ecosystem services),

\(^3\) For more information please see the Food, Agriculture and Fisheries, Biotechnology webpage.
SSH Relevant topics in FP7 Areas other than Theme 8
Socio-economic Sciences and Humanities

published by: TUBITAK / net4society
version: August 2010

Protection against natural hazards) and preserving natural carbon stocks. The project will provide a set of advanced management tools, policy recommendations, guidelines and/or multi-criteria decision support systems specifically applicable to mountain forests in different regions in Europe. This includes modelling of forest stand development (stand dynamics with and without management activities), planning tools for forest treatment (including harvesting, reduction of potential negative impacts on soils and protective functions, choice of tree species for regeneration), suggestions for best management practices as well as proposals for adequate dissemination activities (e.g. core audiences, communication channels, key messages, exemplary training tool kits). Overall, this will help policy makers and forest managers to make the most appropriate choices when managing and further developing mountain forests in order to fulfil all socio-economic and environmental functions.

KBBE.2011.1.2-10: Socio-economic effects of the main management principles of the future Common Fishery Policy (CFP): impact of new policy framework and opportunities for the fishing sector to develop self- and co-management
Call: FP7-KBBE-2011-5

The previous reform of the Common Fisheries Policy (CFP) in 2002 did not resolve the many problems faced by the European fisheries, despite making good progress amongst others in the areas of better stakeholder involvement, phasing out direct capacity-enhancing subsidies, and moving towards long term management plans. As a result, the European Commission is currently undertaking a whole-scale, fundamental reform of the CFP. In the Green Paper of the Reform of the CFP (COM (2009) 163 final) the main structural failings of the current policy were identified as: a deep rooted problem of overcapacity; imprecise policy objectives resulting in insufficient guidance for decisions and implementation; a decision making system that encourages short term focus; a framework that does not give sufficient responsibility to the industry; and a lack of political will to ensure compliance as well as poor compliance by the industry. The aim of this project is to develop and analyze, in cooperation with stakeholders, a range of available management measures and tools that specifically aim to endow fishermen with the incentives to overcome the identified failings and thereby achieve the objectives of the future CFP.

The project will: (i) investigate how the objectives regarding ecological; economic and social sustainability can be defined in a clear, prioritised and overall acceptable manner and which give guidance in the short term and ensures the long-term sustainability and viability of fisheries, (ii) analyze which management measures and at what organization level, create the right incentives to tackle the main structural failings mentioned in the Green Paper of the Reform of the CFP, giving particular attention to, technical measures, command and control instruments (e.g. TACs and quotas, effort), market instruments (e.g. transferability of collective or individual rights) and social instruments (self- or co-management possibilities) and (iii) determine the socio-economic and spatial effects of these management measures. Special attention should be paid to fishermen's behavioural responses to the range of management measures (e.g. incentives) and to the potential links of management measures with uncertainties and externalities (e.g. oil price, interest rates, fish market prices). Considering the points above it should also provide socio economic impact assessment of the range of management measures selected.

KBBE.2011.1.2-12: Role of aquaculture in improving food security and eradicating poverty worldwide. Call: FP7-KBBE-2011-5

General objective: Full description to be further developed: Within the context of increasing awareness of the importance of collective responsibility in combating poverty, 2010 is the "European Year for combating poverty and social exclusion", which is also among the main objectives of the European Union and its Member States. During the recent
FAO's World Summit on Food Security held in December 2009, world leaders unanimously adopted a declaration highlighting once again the pledge to combat poverty and eradicate hunger from the face of the earth sustainably and at the earliest date.

Aquaculture is considered as an important activity for local food security through reduced vulnerability to variations in aquatic production, improved availability of high quality and affordable food, improved access to food and more effective food utilization (FAO, 2003). However, at present, little information exists concerning the scale and extent of rural or small-scale aquaculture development within most developing countries and Low-Income Food-Deficit Countries (LIFDCs), or concerning the direct/indirect impact of aquaculture activities and assistance projects on food security and poverty alleviation. Thus, although it is anticipated that aquaculture could have a significant contribution in combating food insecurity, it is still difficult to measure its potential contribution towards improving food security and subsequently plan, implement and coordinate efficiently, development and research programmes supporting the sustainable expansion of this activity.

The main objectives of the project will be:

1) to review existing and develop new methodologies aiming at quantifying the contribution of aquaculture in combating hunger and poverty in developing countries and LIFDCs,
2) to review past and on-going national and international cooperation activities focusing in promoting aquaculture in a food security context,
3) to review and disseminate: i) best practices, ii) financially viable entrepreneurial aquaculture activities (including small-scale operations), iii) enabling institutional initiatives and frameworks and iv) successful public-private partnerships contributing to aquaculture development in developing countries,
4) to review and assess the role of targeted nutrition education programmes in promoting the production of aquaculture products as a source of nutrition for human consumption in food insecure regions. The project will also consider local social and cultural assets and constraints for the development of aquaculture, as well as, the effects of global trade and markets on enabling or preventing aquaculture from achieving its food security objectives,
5) to identify potential for more efficient coordination between national and EU research and development initiatives focused on aquaculture as means of promoting food security and poverty alleviation. The project will also spot knowledge gaps and technology needs adapted to local requirements and available resources.


Neglected zoonoses- as qualified by WHO- cause not only very important losses to livestock productivity with impact on the whole chain: farmers (meat, milk, hides, skins, wool, labour), local and international traders, slaughter houses, transporters, butcheries, control programmes) but also high burden in the human populations (DALYs, diagnosis, treatments, care, control programmes) in endemic countries.

In line with the principles of One World One Health there is a need to address these diseases with an integrated approach and in particular at the animal human interface. Researchers with the appropriate holistic view and training are therefore necessary. The action focuses of targeted measures aiming at improving the career prospects for young researchers in the animal – human interface of neglected zoonoses, in particular: brucellosis, bovine tuberculosis, rabies and echinococcosis. The key research issues are: the added value of a closer cooperation of human and animal health compared to sectoral work alone, the potential financial savings of a closer cooperation, the potential new institutional arrangements at central and peripheral level of a closer cooperation in partnership (e.g. joint
zoonoses surveillance in animals and humans), the potential of a closer cooperation both in the EU and in developing and transition countries. The activities should comprise training and supporting young researchers to establish independent research activities in disease-endemic countries. In addition to the scientific aspects of the diseases, socio-economic, cultural, institutional and decision making aspects should be also addressed with an integrated and multisectoral approach. Coordination with new and ongoing EU and international activities in neglected zoonoses should be envisaged.

**KBBE.2011.1.4-04: The CAP and landscape management Call: FP7-KBBE-2011-5**

The role of traditional agriculture in providing public services and in fostering the sustainable development in rural areas has been recognised by the scientific community and in the logic of the CAP policy instruments. The most recent EU Policy Framework, and in particular on Rural Development, stressed the importance of agriculture as a driver to support land management and to improve the environmental and the socio-economic development of rural areas. Special emphasis is given to the provision of environmental services from agriculture by agri-environmental schemes and by measures targeted to address EU priorities such as combating climate change, enhancing biodiversity and water quality. Moreover, environmental services and public goods provided through agricultural, also give rise to a range of additional social and economic benefits that can boost the economy of rural areas. In this sense, landscape is one of the public goods provided directly and indirectly by agriculture. Due to its multifaceted character, which includes natural, cultural and societal values, its relationship with agriculture is extremely complex. As for its functions, there is an increasing recognition that landscape is not only an essential element to be preserved, but also an economic asset which can offer significant opportunities for the territorial and economic development of rural areas. In particular, it represents a critical resource for some sectors of the rural economy such as tourism, the agri-food sector, and can be a factor of territorial development in terms of agriculture income, population growth and employment creation. However, in the literature there is no clear evidence of the type of causal relationship between the maintenance and valorisation of landscape and the socio-economic benefits it may generate.

Scientific support to policy is needed to explore the link between agricultural landscape and the economy of rural areas, with a view to addressing policy measures and a number of emerging issues: 1) Is there a clear relation between the valorisation and maintenance of agrarian landscape and the socio-economic development of rural area? 2) Can landscape be considered a driver for the competitiveness of the agricultural sector in rural areas and for the creation of jobs and income in rural areas? 3) What methodologies can be used to measure the socio-economic second order effects rising from the provision of landscape by agriculture and what are the mechanisms that explain the economic impacts of landscape in rural areas?

**KBBE.2011.1.4-06: Towards land management of tomorrow – Innovative forms of mixed farming for optimized use of energy and nutrients. Call: FP7-KBBE-2011-5**

An important element of agricultural sustainability is to establish optimized flows of energy and nutrients with a high degree of recycling by transforming waste into resources such as fertilisers. In addition, optimizing the carbon cycle towards greenhouse gas mitigation is a new challenge for land managers.

Modern specialised crop production systems rely on external inputs for feed and fertilisation, whilst specialised livestock systems face dramatic costs and problems in waste disposal. The profitability and importance of traditional mixed farming systems is drastically reduced because of pressure for specialisation, economies of scale and work load reduction.
The project will evaluate new innovative ideas and develop new strategies to connect livestock and crop production at farm, district and landscape level in order to optimize energy, carbon and nutrient flows preserving natural resources and maximising production. In addition, diversified land use can open up new possibilities for combining food production with biomass production and on-farm production of renewable energy from livestock manure, small biotopes, perennial crops and semi-natural non-cultivated areas.

Profitability, socio-economic aspects of collaboration models and implementation potential in different systems (organic, low external input, integrated, etc.) across Europe will be assessed. Research activity shall also involve innovative forms of collaboration between farmers to identify and test new combinations of agronomic practises (crop rotations, soil management, agro-forestry) and livestock practises (species selection, feeding, management) that will ultimately allow re-orientation of energy, carbon and nutrient flows by rural communities. A participatory approach in the identification and evaluation of the systems will allow immediate transfer possibilities and assessment of legal and organisational challenges. Models will be applied at the various levels to predict productivity gains and economic viability of the mixed farming systems developed.

KBBE.2011.2.1-01: Strategies for improving communication between social and consumer scientists, food technology developers and consumers. Call: FP7-KBBE-2011-5

Communication barriers between food technologists and the public can lead to a rejection of investment intensive and useful new (food) technologies by the public based on misunderstandings, fears or mistrust. This is often due to a lack of information or to a supply of information that cannot be understood by the consumer. In addition, rejection of a new technology can also be the consequence of a lack of knowledge concerning the preferences or needs of consumers. The main task of this project is to identify and better understand existing barriers for consumer acceptance of new products or food technologies by establishing a dialogue between consumers, social/consumer scientists, food technologists and other key players in the food industry to overcome these barriers and promote knowledge-based acceptance. Participants in this action should come from all groups to be consulted before and during technology development: food scientists and technologists from companies, universities and research institutes, industry non-technical experts, consumer scientists, ethical experts, representatives of science media/journalists, consumers and consumer groups.


Evidence shows that adequate nutrition during the six months before pregnancy, the pregnancy itself and the first two years of child’s life is crucial for survival and optimal development (including growth, cognitive, language, social and motor development). Adequate nutrition is key in the achievement of the Millennium Development Goals for reducing the proportion of people who suffer from hunger and malnutrition. However, implementation of science-based policy initiatives to reduce malnutrition is not always successful. The work should explore best ways to valorise existing scientific results on micro-nutrient needs for targeted groups, identify best practices to improve micronutrient status at large-scale and translate efficiently the knowledge into operational capacities such as households, communities, governments. South Asian region countries are targeted. For the development of specific and targeted policy guidance and for ensuring successful implementation of measures/actions to improve micronutrient status, the specificities of the countries
should be taken into account, such as their national health systems and their political, cultural and socio-economic situations.

3. SSH Relevant Topics in the Information & Communication technologies\textsuperscript{4} Work Programme

\begin{tabular}{|l|}
\hline
Call identifier: FP7-ICT-2011-7  \\
Date of publication: 28 September 2010  \\
Deadline: 18 January 2010 at 17.00.00 (Brussels local time)  \\
Indicative Budget: EUR 778.5 Million  \\
\hline
\end{tabular}

**Objective ICT-2011.1.4 Trustworthy ICT**

Target outcomes
The objective is a trustworthy Information Society based on an ecosystem of digital communication, data processing and service provisioning infrastructures, with trustworthiness in its design, as well as respect for human and societal values and cultures. Projects must ensure strong interplay with legal, social and economic research in view of development of a techno-legal system that is usable, socially accepted and economically viable.

**Objective ICT-2011.1.6 Future Internet Research and Experimentation (FIRE)**

Target outcomes
a) **FIRE Facility:** Maturing and expanding the FIRE Experimental Facility: (i) New areas: complementing the offerings of the FIRE Experimental Facility projects (ec.europa.eu/fp7/fire) by new facilities in research areas insufficiently supported by existing prototypes, e.g. social networking, 3D Internet. Each project should provide an operational prototype at an early stage in the project, being gradually expanded in a demand-driven and open way. Each project should also use the mechanism of open calls and dedicate at least 20\% of its budget to innovative usage experiments, each of them not exceeding a funding of 200 K\(\varepsilon\). (ii) Extension: advancing early FIRE prototypes to serve the demands of the Future Internet research communities; the prototypes to be extended should clearly demonstrate the success of the services already being offered in terms of number of users, scale and diversity of experiments going beyond of what can be tested on the current internet. Each project should use the mechanism of open calls and dedicate at least 20\% of its budget to innovative usage experiments, each of them not exceeding a funding of 200 K\(\varepsilon\).

b) **FIRE Federation:** implementing a demand-driven high level federation framework for all FIRE prototype facilities and beyond making the facility self-sustainable towards 2015 based on credible business models assuming a significant decrease of EU funding; including the development of a joint FIRE portal, operated until the end of 2015 and a set of common tools addressing issues such as brokering, user access management, one-stopshopping, measurement and performance analysis. Provisions shall be made for openness towards additional testbeds and facilities, for building as far as possible on proven existing federation

\textsuperscript{4} For more information please see the Information & communication technologies webpage.
models, for the use of open standards, for standardisation and certification policies, for using existing research infrastructures such as GÉANT and the NRENs, and for cooperation with EU national and international initiatives on experimental facilities.

c) **FIRE Experimentation**: Experimentally-driven research in the broad field of the Future Internet using one or more of the existing FIRE facility prototypes. Projects should be challenging both in terms of visionary R&D to be undertaken, e.g. on holistic network and service architectures, on applications with high social value, on low energy and cost solutions, etc.; and in terms of innovative usage of the facility, e.g. large scale & diversity of experiments, broad and systematic involvement of large groups of end-users, complex system-level testing, assessment of socio, economic, or environmental impact, and methodology and tools used for measurements and benchmarking. Proposers must demonstrate a clear commitment of the FIRE facilities they intend to use. Where appropriate, participation from international cooperation countries at use level is encouraged.

d) **FIRE Science**: A multidisciplinary Network of Excellence in the area of holistic Future Internet research to overcome fragmentation and to integrate life and human sciences (e.g. networking, computing, telecommunications, complex systems, security, trust and identity, privacy, sociology, psychology, energy, user interfaces, anthropology, economics, knowledge management). The network shall lay the foundations of an Internet Science allowing a better understanding of the complex nature of Internet networks, services and applications, and their design based on desirable social, economic or environmental objectives, thereby creating an “internet scientist” profile.

e) **Coordination and Support Actions**: EU-wide co-operation with related EU-level and Member States and associated countries activities such as the Public Private Partnership on the Future Internet, or national experimentation facilities; international co-operation with initiatives in industrial countries and emerging economies; co-operation on standardization in order to exploit synergies; socio-economic requirements gathering, impact analysis, and awareness creation.

**Objective ICT-2011.4.2 – Language Technologies**

There is a growing need for effective multilingual solutions that support business and interpersonal communication and enable people to make sense of online content and services in Europe's many languages. Projects shall address multiple languages\(^5\) and cater for written and/or spoken language as appropriate. Technologies must be adaptive, they must handle language in its various uses, cope efficiently with massive volumes, and be embedded within information flows. Contextualisation is a common requirement and so is personalisation.

**Target outcomes**

a) **Multilingual content processing**: Projects will address the digital content lifecycle in online environments, exploiting language-encoded knowledge embedded in documents, social media, web and audiovisual objects. They are expected to (i) advance the current state of the art in the machine translation field, and (ii) improve the usability, performance and cost effectiveness of emerging technologies by means of field testing and embedding within complex processes.

- **Advancing machine translation** is geared towards automation and calls for approaches that can significantly improve the quality and suitability of the translation output, drawing where necessary from other disciplines. Expected innovations include the ability to cope with

\(^5\) Emphasis is placed on the EU official working languages and on the official languages of the other countries participating in the Framework Programme.
everyday language as found in e.g. social networks; to autonomously learn from use and adapt to new situations with high scalability and portability across languages and domains; to compile translation resources from the web, open sources or enterprise repositories, efficiently and accurately.

- Projects under *integration of language-enabled content technologies* shall address a meaningful combination of content authoring, management, translation and publishing tasks and tools within typical production processes and translation/localisation workflows, in real-life multilingual settings. Projects will optimise and integrate promising but untried technologies within demanding application environments, assess their suitability and increase their potential. Field trials will be an integral element of the projects together with user-related and economic (e.g. cost-benefit) analyses.

b) **Information access and mining:** The main thrust under this heading is to couple language processing and extra-linguistic semantic analysis to capture knowledge encoded in human language. Projects shall aim to achieve accurate and efficient deep analysis with broad coverage in any suitable mix of the following domains: (i) cross-lingual information search and retrieval; (ii) audio and video mining by means of linguistic cues; (iii) text mining and information extraction from multilingual collections. The key innovation is the ability to capture and represent concepts and facts, find connections and similarities, extract relations between entities, reason over facts while interpreting time and space, etc., well beyond what is possible with existing techniques. Emphasis is on cross-disciplinary approaches and generic technologies that will be evaluated in selected domains and tasks.

c) **Natural spoken interaction:** Spontaneous human-machine interaction is a major challenge for the next generation of voice-based interactive services. Projects shall develop either complete proof-of-concept systems or component technologies that support a much richer and robust interaction between humans and computer systems. The outcome is conversational social agents that can recognize and synthesize conversational speech; adapt to new conditions without manual intervention and react proactively to new communicative situations; learn from interaction and exhibit graceful degradation; recognize, interpret and generate social cues. Technologies should be portable across domains, tasks and acoustic environments. They should enable non-intrusive interaction, exhibit real-time performance and feature multi- and where relevant cross-lingual capabilities. Focus is on speech interaction, although other modalities may be justified in specific cases.

d) **Developing joint plans, methods and services:** The target community consists of two main constituencies (speech technology and natural language processing) and a wide range of research and commercial organisations which must be brought together along the following lines:
- Establish and pursue widely supported technology roadmaps; stimulate academia/industry partnerships and co-operation with national actors; ease technology transfer by means of demand-oriented analyses, themed workshops and portal services.
- Measure progress and performance of different approaches by means of community driven evaluation methods, metrics and challenges for technology-, system- and application-oriented tasks.
- Develop methods, guidelines and standards to enhance the quality, (re)usability and interoperability of language datasets and processing tools; promote and support open repositories of research results and development/training resources of general interest.

**Objective ICT-2011.5.4 ICT for Ageing and Wellbeing**

**Target Outcomes**

a) **Service and social robotics systems for “Ageing Well”**: The work should focus on integration of advanced robotics systems and intelligent environments to provide solutions to key issues of relevance for improved independent living and quality of life of elderly people
and efficiency of care. Major challenges to be addressed include: self-learning robotics solutions, which can: adapt to the user needs and share contextual information with other artefacts in the surroundings of the user; navigate in unstructured environments and perform precise manipulation of relevant objects; provide affective and empathetic user-robotic interaction, taking into account the acceptance by users. Development of basic robotics components is not called for.

b) **Smart and self-adaptive environments prolonging independent living**: Focus is on flexible ICT solutions able to provide early detection and adaptive support to changing individual needs related to ageing (e.g. increased risk of falls, depression, sleep deprivation, or cognitive decline), and support timely involvement of carers and family.

The aim is to promote better prediction, prevention and support through long-term trend analysis of basic daily behavioural and physiological data, building on unobtrusive sensing and advanced reasoning with humans-in-the-loop. Major challenges to be addressed include: self-learning solutions building on open platforms, which can share contextual information with other artefacts in the surroundings of the user; low maintenance systems capable of graceful degradation in case of failure as well as affective and empathetic user interaction, taking into account the capabilities of elderly users.

c) **Coordination frameworks** to develop i) RTD roadmap and stakeholder coordination on ICT for “Ageing Well”, as well as strengthening development of standards and international cooperation with North America and Asia. This should take into account work already started under the AALIANCE innovation platform (ref http://www.aaliance.eu). ii) RTD roadmap and stakeholder coordination on ICT for 'active ageing at work' establishing a sound ICT research analysis and exploration of possible ethical issues.

d) **Services for elderly people developed and validated against public sector needs through a joint Pre-Commercial Procurement (PCP)**. The services should focus on support to mobility. Key stakeholders in the value chain of service provision should be involved, such as care service providers, insurance companies, housing organisations, relevant industry partners and public bodies. Involvement of users will be an essential element as well as appropriate consideration of safety and ethical aspects. Use of open robotics platforms and contribution to standards is encouraged. PCP shall be implemented according to the conditions outlined in objective 11.1 and Appendix 6. Proposals addressing either a) or b) should have ambitious objectives at the level of a complete system and aim at breakthroughs. The proposed R&D should cover all relevant aspects to allow for operational validation including relevant service models, business models (also those with an active role of the elderly person), safety and reliability as well as ethical aspects. Participation of industry and service providers is important and it is essential that the work builds on and actively contributes to standards. A multi-disciplinary research approach is required. The work shall ensure involvement of elderly people, carers and other users in order to take account of the needs and acceptance of the target user groups and to ensure validation and impact analysis, by building on realistic test environments.

**Objective ICT-2011.5.5 ICT for smart and personalised inclusion**

**Target Outcome**

a) **ICT tools, infrastructures and devices for mainstream accessibility in daily life**: The objective is to support seamlessly accessible solutions and services for persons with disabilities, in various and changing settings (e.g. home, workplace, public transport, shops, education or medical centres, other public spaces, both indoors and outdoors). The research projects should focus on one or more of: 1) Virtual reality and simulation approaches for
developers to design daily life environments and explore potential user interactions building on previous work on 'virtual user'; and prototypes for ambient intelligence multimedia infrastructure (supported by networked sensors, terminals, etc) interacting with users’ interoperable and portable IT devices; 2) Personalisable software-based assistive solutions supported through online/cloud-based platforms. This research should address generic and open solutions responsive to user physical, cognitive and mental capacities, preferences, and the ICT already available to the user.

b) **Intelligent and social computing for social interaction, user empowerment and learning or skills acquisition for people at risk of exclusion:** Advanced ICT-enabled solutions -including social, affective and persuasive computing, and possibly serious games - for the empowerment of people with disabilities or people at risk of social exclusion, including people with low literacy, cognitively or mentally challenged, or with anti-social behaviour, which may include young people. This will aim at self-learning ICT solutions which take into consideration user profiling and feedback, in view to deliver personalised services and enhanced participation in work, education or training, social interaction, etc. Special attention will be paid to information representation, information appropriation and learning by users, and social dynamics, considering also intermediaries supporting final users.

c) **Brain-Neural Computer Interfaces (BNCI) for assisting people with disabilities:** Building on previous research, the BNCl foci now are: adapting BNCl sensor technology for out-of-the-lab use, fusion of BNCl into multi-sensor and multi-modal interfaces solutions, and data/pattern analysis for interaction with ICT-enabled devices and applications. Modularisation, interoperability, and smart processing of BNCl/sensor inputs for increased efficiency (e.g. through predictive approaches) are expected to be key aspects. Work on interoperability of BNCl devices, in particular, should consider potential contribution to standardisation. Research should also explore possible synergies with mainstream application domains, e.g. in gaming, virtual reality or alternative user-to-ICT input in complex multi-task settings.

d) **Coordination and Support Actions** to develop: i) a cooperation framework with Latin America on ICT for skills and empowerment of disadvantaged social groups and local communities, and on ICT for improving personal autonomy of people at risk of exclusion. ii) a cooperation framework at European or international level for promoting the development of accessibility guidance for advanced technologies, services and contents (including evaluation methodologies), with special focus on the internet, and for setting research agendas on e-accessibility.

In a), b) and c) it is essential to thoroughly address user requirements relating to issues such as privacy and other ethical aspects, safety, security and trust, and identity management. It is also very important to involve final and intermediary users at all stages of the research (from design to validation) while, especially for b), facilitating active user participation in any step of the innovation process.

Projects will consider viable business models and applications with high potential and measurable impact on individual quality of life and/or on society at large. Strong involvement of service providers (whether from commercial or public sectors) and other industry is expected. The projects should take account of existing standards and aim at their further development. Projects should include comprehensive expertise while avoiding an excessive number of partners.
SSH Relevant topics in FP7 Areas other than Theme 8
Socio-economic Sciences and Humanities

Objective ICT-2011.6.7 Cooperative Systems for energy efficient and sustainable mobility

Target Outcome
a) **Cooperative Systems for low-carbon multi-modal mobility** covering cooperative applications and services for energy efficiency and eco-friendly mobility based on the harmonised European Communications Architecture28 and bidirectional vehicle-to-vehicle (V2V), road-to-vehicle (R2V) and vehicle-to-infrastructure (V2I) communication technologies:
   - Design, development and testing of new cooperative and pro-active traffic and travel management and control strategies based on the availability of reliable real-time system wide data, including handling of special events and recovery after incidents.
   - Addressing the interaction between the driver, the vehicle and the infrastructure, user acceptance and deployment of cooperative energy efficiency services, taking into account the needs of Fully Electric Vehicles such as integration with charging networks.
   - Liability, privacy, reliability, security and Human Machine Interaction should be addressed as well. The focus should be on road transport, as this sector presents the largest challenges. Projects could also address all transport modes according to the principle of comodality, and include smart urban mobility.

b) **European Wide Service Platform (EWSP) for cooperative system enabled services**, aiming at providing to the drivers and other users a large variety of energy efficiency, mobility, comfort and safety related services:
   - Intelligent combination of wireless communication technologies, development of network and transport communication protocols and security and control mechanisms, and support to their standardisation.
   - Development of the necessary EWSP subsystems for service development, discovery, provision and administrative operations
   - Development of interoperable innovative services for the EWSP, based on Future Internet technologies and in coordination with activities under the Future Internet PPP of Challenge 1.

c) **Coordination and support actions**
   - Dissemination of results, user awareness campaigns, assessments of socio-economic impact and training.
   - In accordance with the specific cooperation agreements with Japan and the USA: active exchange of information and results, and international standardisation and harmonisation. The coordination and support actions should include relevant stakeholders in the domain.

<table>
<thead>
<tr>
<th>Call identifier: FP7-ICT-2011-FET-F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of publication: 20 July 2010</td>
</tr>
<tr>
<td>Deadline: 2 December 2010 at 17.00.00 (Brussels local time)</td>
</tr>
<tr>
<td>Indicative Budget: EUR 10 Million</td>
</tr>
</tbody>
</table>

FET Proactive scheme: tackling targeted transformative research and exploring new large-scale scientific challenges and cooperation models

FET Proactive provides **targeted support** to selected promising domains where **critical mass** needs to be built up, aligned with economic and social challenges and priorities that call for long-term foundational and transformative research. This work programme sets out a
number of Proactive Initiatives in key areas, in some cases also embedding the drive for a global research agenda.

Foundational ICT research in Europe today remains fragmented in most domains, leading to duplication of effort, diverging priorities and untapped potential. FET fosters the networking of research activities conducted at national or regional level, including the development of joint research agendas and a shared vision for foundational research among Member States and associated countries, through ERA-NET and ERA-NET Plus actions. Going beyond this, FET Flagship Initiatives are visionary, science-driven, goal-oriented, large-scale, multidisciplinary research initiatives nucleated from ICT future and emerging technologies. They are envisioned to be long term programmes on a scale much beyond current FET Proactive Initiatives. Activities in this work programme target Coordination and Support Actions to prepare for such FET Flagship Initiatives.
4. SSH Relevant Topics in the Nanosciences, nanotechnologies, materials & new production technologies

Call identifier: FP7-NMP-2011-CSA-5
Date of publication: 20 July 2010
Deadline: For Coordination and Support Actions: 1 February 2011 at 17.00 Brussels local time
Indicative budget: EUR 12 Million

NMP.2011.1.3-4 European Platform on Nano Outreach and Dialogue (NODE)

Developments in nanotechnologies must be matched by continuous communication and dialogue activities, to consider people’s expectations and concerns. The aim is to establish a science-technology-social media-based platform for nanotechnology outreach to support a transparent and continuous dialogue in Europe to continuously monitor and understand consumers’ and citizens’ opinion on nanotechnologies. A specific emphasis on life-long education is essential. For doing this, the platform aims to use online media to upgrade outreach and bring out the differences in attitudes and opinions across Europe, analysing the state of the debate according to cultural and societal specificities.

A new outreach-dialogue model should be developed so to assess the degree of outreach and responses to dialogue on nanotechnology, in view of incorporating them into coherent policy responses. Controversial issues should receive special attention. Hence, the following actions should be undertaken: (i) develop and/or integrate reputable surveys of outreach status and public attitudes on nanotechnology; (ii) integrate and/or set up monitoring stations, networks and infrastructures on nano-dialogue to respond to specific needs (e.g. regulation, safety) expressed by stakeholders; (iii) build-on an extensive tool resource base developed by previous EU FP6/7 projects (i.e. socioeconomic from DEEPEN, NANOPLAT, RISKBRIDGE, MACOSPOL, NANOCAP, FRAMING NANO, NANOCODE, safety from iNTegRisk and MIDIR, outreach from CIPAST, MEETING OF MINDS, NANOPLATFORM, TIMEFORDANO, NANOYOU, NANOTOUCH and DECIDE) and ongoing OECD Working Party results.

Thus, a modular platform should be put in place to enable stakeholders to: (i) detect attitude and behaviour, identify opinions, expectations and concerns related to nanotechnology; (ii) identify and describe their historical traceability; (iii) identify and understand cause-effect relationships according to the needs of stakeholders paying also attention to national specificities and to integrate and validate them on a comparative basis.

---

6 For more information please see the Nanosciences, nanotechnologies, materials & new production technologies webpage.
5. SSH Relevant Topics in the Energy Work Programme

Call identifier: FP7-ENERGY-2011-1
Date of publication: 20 July 2010
Deadline: 16 November 2010 at 17.00 Brussels local time
Indicative budget: EUR 74 Million

There is no related topic under the current Energy call.

7 For more information please see the Energy webpage.
6. SSH Relevant Topics in the Environment Work Programme

**Call identifier: FP7-ENV-2011**

**Date of publication: 20 July 2010**

**Deadline: 16 November 2010 at 17.00 Brussels local time**

**Indicative budget: EUR 155 Million**

**ENV.2011.1.1.6-2 Mitigation policies and measures in the world's major economies compatible with the objective of limiting global surface temperature increase below 2°C**

The proposed research activities should focus on the implications for mitigation and adaptation policies in the world's major economies to meet the objective to limit global temperature change below 2°C from pre-industrial level. Consistent representative concentration pathways used in the Intergovernmental Panel on Climate change (IPCC) context should be used or further developed to identify and assess relevant emission targets and update implied mitigation costs estimates for the world's major economies. Policy implications regarding technology and societal changes, concrete climate policy instruments and their related costs including the integration with technology and energy policies, issues related to governance and political feasibility, as well as obstacles for efficient climate policies should be investigated.

**ENV.2011.1.2.2-1 Combined exposures to environmental agents: integrated approaches to evaluate environment-health relationships in children**

Recent studies have suggested that even very low doses of some biologically active contaminants including toxic chemicals in the environment can alter gene expression important to learning and developmental function. Exposures during early development can adversely affect learning and development of the individual and last a lifetime, with huge economic and social consequences.

Humans are exposed to complex mixtures of environmental contaminants that can interact to enhance adverse effects. The aim of the project is to develop better and sophisticated tools, procedures and testing methods to screen compounds for neurotoxicity and to improve assessment of exposures and effects. Timing of exposure, the role of bioaccumulation and mixtures, mechanisms of disease development and the role of individual susceptibility should be examined using latest biotechnology tools available. The validity and usability of these integrated tools should be tested in a (prospective) epidemiological study, especially focusing on learning and developmental disorders in children. The study should include aspects of environmental justice and socioeconomics including economically disadvantaged children.

---

8 For more information please see the Environment (including Climate Change) webpage.
ENV.2011.1.3.2-1 Building societal resilience to disasters in Europe

In the frame of an interdisciplinary context involving social and natural sciences, research should develop a conceptual and methodological approach to clarify how the resilience capacity of a society confronted with natural hazards and disasters can be characterized, defined and measured. Based on well analysed and representatives case studies or given situations, one should develop a way to assess the state of resilience and propose strategies and support measures to enhance it. Attention should be paid to scale (spatial and temporal) and their integration. Further consideration and clarification need also to be given to associated concepts like preparedness, risks governance, capacity building.

ENV.2011.2.1.5-1 Sustainable and Resilient Green Cities

Urban resilience relates to a city's ability to respond to a number of combined "grand challenges": natural resource shortage ("peak oil", water, etc.), climate change adaptation and mitigation, and unprecedented urban growth; in ways that are socially, economically and environmentally acceptable and feasible. The aim is to develop positive transition strategies and scenarios to enable cities (and their rural interface) to meet these combined "grand challenges" by reducing their urban ecological footprint, via the innovative development of: public and private green infrastructure (ie: green walls and green roofs) and spaces, organic materials/products and green processes – inspired by nature (ie: biomimicry); rehabilitation of ecosystem services and urban biodiversity, urban/industrial regeneration, land use planning and creative design; short-circuit economies (increased reliance on local goods and services), improved climate-neutral infrastructure for sustainable waste, water, energy and transport management, while also fostering greater equity and social cohesion, and mitigating negative environmental impacts. The strategies must also limit urban sprawl to privilege compact and polycentric approaches, so as to reduce transport and energy costs, retain valuable agricultural land and natural areas, and protect landscape value, while limiting the negative effects of densification (ie: increased vulnerability to risk, noise, stress, safety). Lasty, the research should develop novel methods to enable adaptive governance, collaborative decision-making, and behavioural change to assist local authorities and citizens implement the transition from today largely unsuitable reality to tomorrow's resilient and sustainable European cities. The research will integrate expertise from the following disciplines: architecture, urban planning and design, bio-physical sciences, public health, socio-economics, decision-making and governance, technology, and art. It should to the extent possible adopt a wide geographical distribution of cities (case studies) representative of all European regions. The research will extend well beyond the traditional combination of scientific disciplines exploring the interface between art and science.

ENV.2011.2.1.5-2 Furthering Strategic Urban Research

This coordination action will further the long-term strategic framework for scientific cooperation related to urban research by enabling knowledge transfer and the building of a structured dialogue, responding in this way to the following interconnected issues: environment and urban planning, energy, transport, tourism, technology and innovation, governance and education, social equity and cohesion, sustainable consumption; towards the reduction of the "urban ecological footprint". It will promote the importance of open innovation, scientific advice, indicators and data collection and ensure the transfer of best practices adapted to the realities of European cities in view of climate change and natural resource scarcity, in particular "peak oil" and water. It will address complex and policy relevant issues in a problem-solving, integrated way, through collaborative techniques and wide stakeholder involvement including SMEs.
ENV.2011.4.2.1-1 Efficiency assessment of environmental policy tools related to sustainability

The challenge of decoupling growth from environmental pressure has led to a shift in the environmental policy mix, with increasing importance being given to market-based instruments. Based on an empirical analysis of the changes in the environmental policy mix, research is needed to assess the effectiveness, efficacy and efficiency of its different components and of their different combinations (auctioned tradable permits, environmental taxes, removal of harmful subsidies, regulations, stimulus packages investing in green technology and industries, etc.) This should be done with regard to the pursuit of sustainable development, taking into account the three pillars (environmental, economic and social) on an equal footing.

ENV.2011.4.2.2-1 Knowledge brokerage activities for engaging in a "beyond GDP" society

New ways are called for to make use of research results in policy-making through their "secondary exploitation" in order to support the mainstreaming of the "GDP and Beyond" policy process. Economists and other stakeholders have for a long time pointed to the shortcomings of GDP in taking into account environmental and social aspects. Yet, it is only recently that these concerns have come to the core of the political agenda, notably with the European Commission Communication of August 2009 "GDP and beyond: measuring progress in a changing world" and report by The Commission on the Measurement of Economic Performance and Social Progress ("Stiglitz report") issued in September 2009. This topic calls for the mobilisation of scientific knowledge to accelerate the shifting away from GDP as an exclusive mainstream indicator. In the proposal, the "research reservoir" shall be made explicit as well as the policy aim for activating this research reservoir. The proposal shall guarantee full involvement of policy makers, either through the composition of the consortium and/or through the work plan design. Over the duration of the project, knowledge brokerage activities should systematically monitor and report the progress of "GDP and beyond" issues and build structures designed to continue beyond the project's duration. Due to the experimental nature of the project, and the importance of the learning process, the design should include an in-built evaluation process that documents and critically analyses successes and difficulties with the knowledge brokerage approach.

ENV.2011.4.2.3-1 Community based management of environmental challenges

Away from panaceas and silver bullet solutions, local community members can create and enforce original rules that lead to successful and sustainable economic governance models if given access to and in control of their own resources. Supporting these findings, this topic calls for partnerships between civil society and research organisations. These partnerships should identify and analyse locally owned and developed solutions put in place to prevent and resolve tensions arising from a necessary new repartition and use of natural resources, including ecosystem services, due to environmental and climate changes. Adapted outcomes of this research will be shared and potentially implemented with two to three other local communities confronted with the same kind of challenges and seeking support and collaboration in finding ways to overcome their difficulties. The overall focus is on Latin America.
ENV.2011.4.2.3-2 Sustainable Consumption and Production at the heart of green growth

There is a need for more research on the interrelations between sustainable consumption and production on the one hand, and economic dynamics on the other hand. This will help to improve our understanding of the different drivers of the current unsustainable patterns and levels of production and consumption and their growth dynamics. The topic calls for looking beyond the behavioural perspective and for adapting a more systemic approach. Concepts, options, risks and relevance of green growth should be revisited and enhanced with a view to encourage structural changes towards sustainable consumption and production. How can we ensure that successful "niche" strategies lead towards more general sustainable solutions? In particular, alternative business models and regulation frameworks could be explored in one or two specific areas such as food, energy use or mobility patterns.
7. SSH Relevant Topics in the Transport Work Programme

Call identifier: FP7-TRANSPORT (TPT)-2011-RTD-1
Date of publication: 20 July 2010
Deadline: 2 December 2010 at 17.00 Brussels local time
Indicative budget: EUR 6.00 Million

TPT.2011.1-1. Enhancing connectivity between research solutions and policy-making for the sustainable development of Transport

Content and scope
Socio-economic research, including sustainability research is needed to understand the character, the mechanisms and the requirements of the institutional transition in society, culture, economy, regulation and politics necessary to allow for sustainable development (SD). It means to further develop and combine interdisciplinary research methods (e.g. technology and social sciences, as well as qualitative and quantitative perspectives), to deepen knowledge about various groups transport needs and activities, and to map and analyse what transport mode and transport activities are preferred among various user groups within different regions in Europe. Best practise from SD-perspective certainly differ according to users’ needs, functions and experiences as well as according to different regional conditions. However, the picture of SD-oriented solutions in combination with various users’ needs, experiences, etc. in different regions still seems quite scattered.

Foresight exercises and SD-oriented socio-technical experimentation and shaping constitute important tools for identifying and mobilising opportunities. Of particular importance is the interaction between industry, researchers, policymakers and other stakeholders. However, SD-related research results are often underutilized in policymaking, due to a lack of links between disciplines and between research and policy. Knowledge brokerage processes as well as other mechanisms are needed to leverage knowledge for SD-related use and policymaking. Already running activities aiming to increase the connectivity between research and SD-policymaking should be continued and reinforced. As an example, one area which has shown initial promise and significant potential to address a range of policy objectives, and which could be taken forward in this way is Intelligent Transport Systems (ITS).

The proposal should cover:

• State-of-the-art of the main foresight exercises and importance of sustainable development in Transport policymaking.
• Potential opportunities of enhancing connectivity between disciplines, research, stakeholders and policymakers.
• Concepts for knowledge brokerage processes and other possible mechanisms.

9 For more information please see Transport (including aeronautics) webpage
SSM Relevant topics in FP7 Areas other than Theme 8
Socio-economic Sciences and Humanities

- Comparison of policies based on technological solutions (e.g. ITS) against other policy interventions (e.g. pricing, regulation, investment in infrastructure, encouraging modal shift) to solving specific transport challenges.

The work could be of cross-cutting character (concerning technologies and Transport challenges), or more focused on particular examples (either cross-modal or addressing more than one transport mode) including the evaluation of costs and benefits of a range of specific interventions.

TPT.2011.1-2. Transport needs for an ageing society

Content and scope
An ageing European society requires the elderly mobility issue to be addressed. While some aspects related to this group of transport users have already been addressed in research activities, an overall picture is missing. Therefore an effort should be undertaken to comprise current knowledge, identify research gaps, and develop an action plan on how to proceed ahead for innovative solutions. Special attention should be paid to the gendered nature of the issue: a majority of the elderly will be women, due to the shorter life expectancy of men, and research has shown men and women to have to some extent different mobility needs and possibilities. The development of guidelines, requirements and specifications that allow a safe and adequate usage of different transport modes for this group can be one approach. The application of these results to other related special groups (e.g. disabled, people who are not computer aware) could also be considered. Generally the activity should take into account all relevant aspects including human and gender-related factors related to the use of transport (e.g. mobility patterns, driving ability, and human-machine interface), safety and infrastructure needs. Geography and regional differences as well as welfare and cultural ones are also crucial for mobility issues of the ageing society which need to be investigated thoroughly. Also, possible goal conflicts between social sustainability and e.g. environmental sustainability, merit attention. This work would support a strategy for future transport in an ageing society and specific research topics for European and national RTD programmes could be defined.


Content and scope
A number of EU-FP projects have recently analysed the relationship between research projects and innovation of the past and present, in order to examine their socio-economic dimensions. Future breakthrough innovations, which can be expected in the European freight transport sector, have also important socio-economic connotations, and it would be for authorities and industry to define supportive incentives and conditions, i.e. the conditions for acceptance, the economic and environmental costs as well as the employment and quality of skills required. To understand the sector prospects, in particular to the carbon-neutral transport objective, the upcoming global competition for the European transport industry and developments in non-European countries should be incorporated.

The objectives of this action for freight transport (including inter-modality and co-modality aspects) would be to:

- Identify expected breakthrough innovations in the next 10 years.
- Anticipate the impact of breakthrough innovations on the transport system.
- Analyse the upcoming global competition for the European transport industry.
- Outline the market penetration for breakthrough innovations in Europe and non-European freight transport, including the role of standardization and spillover effects.
• Detect socio-economic opportunities and obstacles of targeted innovation in the transport sector.
• Propose supportive incentives and actions necessary from public authorities.

TPT.2011.2-1. Integration of passenger transport modes and travel information services through the analysis of social behaviour, mobility patterns and business models as basis for the decarbonization of the European transport system

Content and scope
To understand and treat the increasing threat from the climate change without reducing the mobility substantially and by that the level of welfare it is important to better understand transport behaviour and how transport services are used. Current research has proved that there are marked gendered profiles in relation to different modes and uses of transport across the European Union. Yet there is a need to provide new and better understandings of rising mobility and the consequences for individuals, regions and society, as well as clarifying important dimensions related to identities, practices and structures of mobility in the 21st century. National travel surveys have been collected data in most countries but using different methodologies. The role of internet as information and marketing channel is of growing importance. Mobile, location-aware communication tools have the chance to influence mobility patterns fundamentally. Emergence and growth of socioeconomic trends will involve modifications in population mobility and transportation demands. Therefore it is suggested to promote coordination and cross European analyses, considering the diversity of transportation actors and modes, in order to exploit the untapped potential for a better understanding of transport system through the analysis of social behaviour, mobility patterns and business models, taking into account equality and social, generational and gender issues. Sustainable and active modes should also be considered, i.e. issues around walking and cycling. This analysis and modelling should result in new and improved service offerings that promote and encourage changes in mobility patterns to ensure the sustainability of the system.

The proposal should cover:
• State-of-the-art in travel behaviour surveys and their results across Europe.
• Identification of relevant factors and key drivers, including unaddressed needs as well as opportunities for solutions through co-modality.
• Harmonization needs on travel behaviour analysis.
• Analysis of ICT measures and solutions (e.g. seamless multi-modal location system) to support and influence mobility patterns (especially in the context of public transport and multimodal transport chains) and provide behavioural data.
• Rural issues, including community / tailored / demand responsive transport.
• Analysis of potential for decarbonization.
This is an area of research with potential synergies and complementarities with national activities that should be properly considered.

TPT.2011.2-2. Enhanced cross-fertilization and synergies in research actions dealing with safety aspects

Content and scope
Safety of passengers and goods is ensured by increasingly sophisticated tools, techniques and complex systems addressing the vehicles, the associated transport system and the effective interconnection among them. This action would allow for:
• Reviewing ongoing research projects in all transport modes in the relevant fields, e.g. risk-based analysis and design techniques, use of advanced intelligent communication, surveillance and navigation systems, and associated models of complex systems.
- Analysing similarities and differences in order to identify synergies.
- Identifying strategic research domains where the research efforts need to be emphasized.
- Drafting a plan with recommendations to improve the coherence and effectiveness of research actions in the different transport modes.

The involvement of regulatory and safety agencies will be considered as an asset. International Cooperation is particularly encouraged in this activity either with international cooperation partner countries and/or other countries (e.g. USA, Japan, etc).


**Content and scope**

Current socio-economic trends and challenges in various fields (climate change, oil and energy, pollution and health, decongestion of transport, population ageing, etc.) call for accelerated uptake of technological advances in the transport industry. This relates to transports modes considered individually, but even more importantly, to technical achievements in the field of inter/co-modal integration, particularly between high capacity and usually long-distance modes (road, railways, air, waterborne) with local/urban modes.

In order to quickly unlock the value of technological advances, joint business drivers and synergies must be the force behind their adoption by all the stakeholders in the transport chains. The purpose of this activity is hence to analyse, identify and model, from economic, managerial, operational and technological viewpoints, specific opportunities for inter/co-modal transport, both for passengers and goods, that show evident unaddressed needs, value add opportunities, or new business models, based on R&D achievements as well as on the analysis of socio-economic trends. The activity should identify the major thresholds for inter/co-modal transport and present roadmaps to overcome these thresholds and that are endorsed by the different ETPs active in Transport. The roadmaps should point out and describe the required integration of R&D results and activities as well as policy options, so that the different stakeholders can materialize the identified quick-wins in concrete technology development and integration roadmaps and take the necessary actions to bring inter/co-modality further.
8. SSH Relevant Topics in the Space Work Programme

Call identifier: FP7-SPACE-2011-1
Date of publication: 20 July 2010
Deadline: 25 November 2010 at 17.00 Brussels local time
Indicative budget: EUR 99 Million

SPA.2011.3. 5-01 European Space Policy Studies

Several different supporting and coordinating projects are to be funded within this part of the Work Programme, ranging from studies and event organisation to research coordination and setting of European space research agendas.

The Council conclusions of 26 September 2008 set priorities for the future implementation of the European Space Policy, notably in the areas of space and climate change, space and security, space exploration and the contribution of space to the Europe 2020 as new priority areas. The conclusions of the European Council of December 2008 call for the launching of a European plan for innovation encompassing all the conditions for sustainable development and the technologies for the future including space technologies and derived services. Thus, the European Council linked space to innovation and – in a wider sense to the need to prepare for European economic recovery. In view of this, the Space Work Programme 2011 supports studies focusing on the implementation of the European Space Policy following the September 2008 Space Council and the 2008 European Council. Of particular interest are studies related to the link between space and innovation (forming the basis for a series of brainstorming sessions or workshops with industry representatives and the different innovation actors in Europe leading finally to a roadmap for space and innovation), the socio-economic benefits attached, and on questions related to space exploration, Europe's role in the global space exploration initiative as well as the European Union's role in this important field. In the area of space exploration, educational activities are required to raise the public’s awareness to our specific situation in space, to develop a public understanding of the solar system and the co-evolution of life and spaceship Earth. They are to increase awareness that Space exploration is an enterprise on global scale and thus requires global cooperation – a new and interesting challenge for humankind. Activities proposed in this context should combine different ongoing national activities. In order to facilitate better planning of European Space activities, support or coordination actions are to be funded which aim at coordination of different R&D activities in exploration, such as the experimentation potential on the ISS, roadmaps for future robotic missions (e.g. Mars sample-return), as well as to develop a long-term perspective on human exploration. Such roadmaps could also contribute in particular to finding a European position on human Space exploration, and should also investigate the potential and benefits from international cooperation.

11 For more information please see Space webpage
9. SSH Relevant Topics in the Security Work Programme\textsuperscript{12}

\begin{table}
\begin{tabular}{|l|}
\hline
Call identifier: FP7-SEC-2011-1 \\
Date of publication: 20 July 2010 \\
Deadline: 2 December 2010 at 17.00 Brussels local time \\
Indicative budget: Total call budget EUR 221.43 Million \\
\hline
\end{tabular}
\end{table}

\textbf{Topic SEC-2011.6.1-1 Analysis of the security systems in Europe}

\textbf{Description of the topic:}
The objective is to explore and compare relevant cultural phenomenon and legal determinations of civil security across Europe, taking into account the existing significant differences between countries and regions. Firstly, a sample of a few diverse security regional architectures should be studied in a comparative analysis regarding the sharing of responsibilities between public and private bodies and the role that citizens play in regional security architectures. Secondly, it should be studied how the identified differences affect the effectiveness and efficiency of different kinds of security systems.

\textbf{Topic SEC-2011.6.1-2 Protection of European citizens abroad}

\textbf{Description of the topic:}
At the present moment no system can broadly localise and communicate with EU citizens abroad in case of a disaster (e.g. earthquakes, tsunami) within the right time frame and in all locations. The aim of the action is to investigate and define the capabilities and procedures which would help localise and inform consular personnel and citizens in crisis situations. It is important to take into consideration legal, sociological and ethical aspects, including preserving privacy.

\textbf{Topic SEC-2011.6.1-3 Signs of ‘early warning’ to detect trends and weak signals in social polarisation, violent radicalisation development and segregation}

\textbf{Description of topic:}
The task is to obtain a deeper understanding of the signs of ‘early warning’ and weak signals of social trends that may lead to violent extremism and even terrorism (e.g. polarisation, violent radicalisation development and segregation at collective or individual level), in order to facilitate effective policies and counter-measures and increase the society resilience. The first goal should be to use these signs to build indicators allowing to curb, stop or prevent these social processes. The second goal should be to understand whether and how specific contextual and structural conditions (e.g. residential segregation, social exclusion, unemployment etc) may foster the adoption of extremist views resulting in violence/terrorism.

Thirdly, technical and social environment (including Internet) should also be considered because they create rules and boundaries at the same time that they open new possibilities for terrorist activities. The internet should be treated as a stand alone context insofar as it offers a unique venue for information sharing, indoctrination, recruitment and organisation of

\textsuperscript{12} For more information please see \textit{Security} webpage
attacks. A particular effort should be made at measuring and predicting the technological capabilities of groups that are likely to radicalise violently. An attempt should also be made at forecasting technological evolvement which would lead into more dangerous forms of terrorism and defining early warning signs for such activities. This will enable monitoring of technical capabilities in addition to social driving forces. Main actors that are best positioned to provide early warnings should be identified and best practices and efficiency of existing action plans should be assessed. Alternative approaches and best practices tried out in different European cities, such as cooperation between police, schools and community activities should be looked into. The research should in addition, address the possible pitfalls or risks of developing early warning indicators. It should integrate in the process ethical and legal issues, including on national level and elucidate in the results the relationships between the devised tools and privacy.

**Topic SEC-2011.6.1-4 Reduction of the cognitive biases in intelligence analysis**

**Description of topic:**
Intelligence analysts are involved in analytical processes to assess and react to certain situations. Throughout that analytical process, they might be subject to cognitive biases that may have a negative impact on the quality of the final assessment. The purpose of this topic is: a) to have an overview of cognitive biases (synthesis), b) to explore the extent to which cognitive biases can be described and modelled with the objective to reduce the risk for cognitive biases (feasibility) in analysis, and c) to investigate the potential integration of these models into analysis tools in a service oriented open architecture.

**Topic FP7-SEC-2011.6.1-5 Surveillance and the challenges for the security of the citizen(coordinated with the topic SSH.2011.5.1-227 Surveillance and the challenges for democracy and an open society of the 2011 SSH Work Programme.)**

**Description of the topic:**
A wide range of surveillance systems and technologies have been developed and used by both public authorities and private actors over time, with a peak in the aftermath of the terrorist attacks of 2001. This has also been the case in the European Union, and the trend is likely to continue. It is thus necessary to examine the factors underpinning such development and – especially- their implications in terms of actual effectiveness in fighting crime and terrorism, social and economic costs, protection or infringement of civil liberties and fundamental rights and ethical aspects.

The topic aims at evaluating the impacts of different surveillance systems for the security of the citizens. Aspects such as reduction/displacement of criminality, prevention vs. prosecution, efficiency of treatment / storage of information, effectiveness in fighting terrorism, social and economic costs, etc should be taken into account, as well as legal and ethical aspects. A large and comprehensive review of systems, procedures, use of surveillance systems in Europe and their effects on security, and the perception of them by the citizens, would allow decision makers to make better choices (how relevant the systems are for the planned applications, etc), and to give them a better understanding of the acceptance/non-acceptance by the citizens of different types of surveillance systems. It would further help manufacturers to adapt their systems, and help users to adapt the deployed systems more efficiently. The work should also take into account any previous studies and projects in this area also within other themes of FP7/FP6 (notably SSH and Science in Society). The active participation of the different stakeholders and, in particular, involvement of end users is essential. A large dissemination of the results is expected.
SSH Relevant topics in FP7 Areas other than Theme 8
Socio-economic Sciences and Humanities

Topic SEC-2011.6.2-1 Best practices for enhancing security policy in urban zones

Description of the topic:
Crime and instability in urban areas emerge from a variety of factors, for example, economic
decline; poor urban planning; pre-existing ethnic/religious divides; endemic organised or
gang crime; tensions due to immigration; etc. Such problems persist in many European cities
and are likely to be amplified by the recent economic downturn. There is a need to identify
and tackle these underlying problems as soon as possible to prevent undesirable security
scenarios arising. Tackling such security issues requires actions which are interlinked in a
complex way. In order to mitigate these undesirable security scenarios the task is to examine
best practice in successful urban zones – especially those that already have managed a
successful transformation - and thereby to develop metrics that can inform local policymakers
indistressed environments. These metrics will consider the economic, environmental,
educational and social actions which need to be orchestrated to suit local issues and context.
It is expected that the metrics will be adopted and implemented by representative urban
areas and that progress will be benchmarked throughout the course of the project. The task
might also consider the provision of an early warning system where metrics are used to alert
authorities to the above dangers.

Topic SEC-2011.6.3-1 Assessing trends and threats in a society

Description of the topic:
In maintaining the agenda for Security Research aligned with future threats, continuous
benchmarking of the activities is needed. This action should:
- Analyse the results of completed, ongoing and planned security related research
  activities (in the context of the FP7 Security theme but not only, ).
- Analyse and compile previously identified needs,
- Identify future possible/probable threats through possible scenarios,
- Derive related needs and associated research priorities.

Possible scenarios should result from a comprehensive analysis of factors of the
human/societal system, including: e.g. crisis prevention, new forms of terrorism;
increased accessibility of technologies that could be used for malevolent intents.
The efficient use of new technologies available to administrative bodies in charge of
the planning of security relevant research should be emphasised. This includes: modelling
tools, treatment of experts opinions; virtual reality tools; risk monitoring; a ‘Watch’ function
for early warning of weak societal signals, tools for the analysis of different factors or events
to prevent crisis scenarios, etc…

Topic SEC-2011.6.4-1 Develop socio-economic methodologies which can be adapted
to different missions in security research

Description of the topic:
Citizens’ needs, rights and expectations affect society’s specific requirements on security.
Even when taking those societal needs into account not all security measures are as
effective as expected. Existing and future methodologies should handle new and future
needs, which require being reviewed, improved and tested. The objective of the topic refers
both to the analysis and definition of future expectations in terms of security and the
methodologies to be applied to detect inefficiencies, according to the aim of a safer and
sustainable society. The existing and future methodologies could be applied to the different
missions defined in security research, in particular transport or critical infrastructure
protection. Transport and Critical infrastructure (CI) play a pivotal role for upholding primary
societal functions. Their disruption or destruction would create a deep impact on the
economic and social well being of the citizens. Researching the implications of such failures states a central condition for relevant safety and security measures to be developed and implemented by the responsible public and private security providers (end-users). Develop socio-economic methodologies which can be adapted to different missions defined in security research such as transport or critical infrastructure protection in order to help and support decision-making processes. The action could also assess the external dimensions of an attack on a CI, for instance energy supply lines, that would have not only a massive long term effect on the EU economy but also consequences regarding the relations with third countries.

**Topic SEC-2011.6.5-1 Conflict resolution and mediation**

**Description of the topic:**
The overall idea for this topic is based upon restorative justice (RJ) containing theories, ideologies and practices of conflict resolution within civil and public societal sectors, involving people in democratic processes for peace building at different societal levels. Being an alternative to other legal justice forms, the RJ approaches focuses on the relationships between people at conflict, not on adversaries; on parties and not on counterparts; i.e. emphasising solutions for the common future and giving less weight to the objective facts of the past. This approach may differ and constitute an alternative to academic as well as practice fields so far dominated by historical, technical and political scientific studies of peace, war, terrorism, risk, security and gross national/population violence.

**Topic SEC-2011.6.5-2 The relationship between Human privacy and security**

**Description of the topic:**
Several governments, and the European Union as a whole, have chosen to invest in new technological devices to foster a proactive attitude against terror (e.g. closed circuit television, passenger scanning, data retention, eavesdropping, biometric passport, etc). Although these technologies are expected to enhance public security, they are subjecting ordinary citizens to an increasing amount of permanent surveillance, potentially causing infringements of privacy and a restriction of fundamental rights. The traditional approach frames the relationship between privacy and security as a trade-off, whereby any increase in security levels would inevitably curb the amount of privacy enjoyed by any citizen. Therefore, mainstream literature on the public perception of security technologies generally aims at enquiring how much privacy citizens are willing to trade in exchange for security. The trade-off model has however been criticised, because it approaches privacy and security in abstract terms, and because it reduces public opinion to one specific attitude, which considers these technologies as both useful in terms of security and potentially harmful in terms of privacy, and alternative attitudes may exist and are allegedly more common. The proposal should explore the actual relationship between Trust and Concern, on the one hand, and Privacy and Security on the other hand.

In doing so the following questions should be addressed:

-Do people actually evaluate the introduction of new security technologies in terms of a trade-off between privacy and security?
-What are the main factors that affect public assessment of the security and privacy implications of given security technology?

The data should be gathered across Europe, for instance via surveys/questionnaires to a representative sample of the population. It should be analysed, and both national outcomes and comparative outcomes be generated.
JOINT CALL: THE OCEAN OF TOMORROW (KBBE, ENERGY, ENVIRONMENT, TRANSPORT)

Call identifier: FP7-OCEAN-2011
Date of publication: 20 July 2010
Deadline: 18 January 2011 at 17.00 Brussels local time
Indicative budget: EUR 45 Million

OCEAN.2011-3: Assessing and predicting the combined effects of natural and human-made pressures in the Mediterranean and the Black Sea in view of their better governance Call: FP7-OCEAN-2011

The capacity of the Mediterranean and the Black Sea to provide goods and services to their surrounding populations may be compromised in the near future if anthropogenic and natural pressures are not considered in connection with the natural sensitivities and capacities of the marine environment in an integrated, ecosystem-based way. An integrated approach for governance in the Mediterranean and in the Black Sea basins is therefore needed.

The overall objectives of the project are to promote sustainable well-coordinated research efforts in order to characterise patterns of pressure in environmental and socio-economic terms on the Mediterranean and the Black Sea and to develop a framework for future implementation of adaptive policies and management schemes, while fostering international cooperation with neighbouring countries.

Firstly, the project will develop expert systems in order to address the objectives of the topic, making the best use of the available observational and monitoring capability currently deployed in both basins. In particular it should take advantage of and be built on systems such as the ones currently deployed through the Global Monitoring for Environment and Security (GMES) and the Group on Earth Observations (GEO) initiatives, or as the fisheries data collection. Where needed, the project should fill short term data gaps and propose options to fill gaps on a continuous basis in the long term. This will include making more compatible the role of existing and future research vessel (i.e. a new multipurpose mobile platform for environmental data collection) with the current effort to monitoring systematically the environmental status of the Mediterranean and the Black Sea conditions through an integrated observing system.

Secondly, the project shall build an integrated knowledge-base for understanding the patterns of anthropogenic and natural pressures in the Mediterranean and in the Black Sea. In particular, it should develop the science-base needed to understand how the natural land-ocean processes that are characteristic of semi-enclosed basins (peculiar role of air-sea fluxes and fresh water fluxes, specific water mass ventilation rates, hydraulic control of flows across straits) and the anthropogenic processes (effects of large cities, coastal development, pollution, recreational activities, fishing and aquaculture activities) interact in these two basins.

It is a two-stage call. First stage is on 16 November 2010. Then, the second stage is on 26 April 2010.
Thirdly, the project shall provide a scientific rationale for a basin-wide promotion of the principles and objectives put forward in the Marine Strategy Framework Directive (MSFD) in close collaboration with the neighbouring countries in order to achieve Good Environmental Status (GES). It should be built upon existing models, in particular those developed under GMES, improve prediction and management of key anthropogenic and natural processes and their impacts in the Mediterranean and the Black Sea.

The project shall cover both Mediterranean and Black Sea basins and foster international cooperation. It will aim to build scientific capacity in the countries bordering the Mediterranean Sea and the Black Sea to strengthen European efforts to address the environmental challenges faced in the two semi-enclosed seas, jointly with neighbouring countries.

Finally, the project will develop a small research and survey vessel concept to be used for coastal areas, estuaries, as well as port areas, navigation channels. The innovative research content concerns a small vessel with low draft that can operate with very precise innovative dynamic positioning, novel propulsion in shallow waters and normal sea states. As well a being suitable for a wide range of research related users, the vessels will address the needs to survey, accurately and efficiently shallow water navigation channels, an important navigation safety issue for shipping, particularly in areas with shifting sands.

**OCEAN.2011-4: Knowledge-base and tools for regional networks of MPAs, integrated management of activities together with assessment of wind energy potential in the Mediterranean and the Black Sea Call: FP7-OCEAN-2011**

Due to the specific nature of the Mediterranean and Black Sea and the rapid expansion of sea-based activities, there is a need to create new knowledge to support the development of decision maker's tools for optimizing the management of human activities, within an integrated coastal and marine space system.

The objective of the project is to build up scientific basis firstly for establishing regional or sub-regional wide networks of marine protected areas (MPAs) for conservation and better management of marine living resources, secondly for assessing offshore wind energy potential while evaluating possible synergies and conflicts of use with other marine activities.

Research on MPAs will concern the establishment of scientific guidelines, criteria, models and tools for the design, mapping, management, monitoring and control of regional or sub-regional networks of MPAs including deep-sea habitats and areas beyond national jurisdictions. These networks of MPAs should respond to clearly established objectives, from protecting biodiversity (strict reserves) to achieving a sustainable exploitation of aquatic living resources by preserving nursery grounds and juveniles (restricted areas).

The focus will be on the identification of priority areas in both basins through a hierarchical approach based on ecological and socio-economic criteria in underrepresented or poorly studied areas and ecosystems (e.g. the high seas and the deep seas). Sizing, spacing and ecological connectivity and interdependency between sites will be studied for optimal maintenance of species populations and biodiversity (spill over effect), considering possible genetic exchange, larval behaviour patterns and larval dispersal and making the best use of molecular science and multidisciplinary approaches between marine genomics and ecosystem science. Habitat discontinuity and fragmentation, physical oceanography should also be considered. The development of
management strategies for implementing the regional networks such as regulation measures to limit and ban certain practices, dynamic closures, legal issues for managing trans-boundary areas and high seas MPAs are key elements of the project. The project should also promote innovative communication strategies between scientists, managers, fishermen, shippers, NGOs, potential users and public at large.

Research on wind energy will provide a scientific basis for assessing off-shore wind potential in the Mediterranean and the Black Sea, focusing on areas already identified as promising with respect to wind regimes. The project should assess the potential for offshore wind power production based on the use of existing models. It will also evaluate potential conflicts with other uses of the space (MPAs, maritime transport, on shore large desalination plants, dredging, fishing, aquaculture, sub-sea cables, pipelines, tourism, etc). The project should deliver scientific guidelines for an enriched "wind atlas" for decision-makers and planners.

Moreover the project shall launch two pilot studies, at least one in the Mediterranean and one in the Black Sea, addressing the establishment of regional networks of MPAs, also combining if possible wind energy development, and considering all the possible conflicts from other maritime activities. The pilot studies should address selected areas within regions or sub-regions of the Mediterranean Sea and the Black Sea as defined in the Marine Strategy Framework Directive. The project should reinforce capacity building in support to international cooperation by transferring and making compatible methods across the two basins and by promoting common rules and practices in particular with non EU countries from Balkans, Southern Mediterranean and Eastern Europe bordering the two seas.
II. Ideas Specific Programme\textsuperscript{14}

1) ERC Starting Independent Researcher Grant

<table>
<thead>
<tr>
<th>Call identifier: ERC-2011-StG_20101014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of publication: 20 July 2010</td>
</tr>
<tr>
<td>Deadline: 24 November 2010 (for the SSH Panels)</td>
</tr>
<tr>
<td>Budget: 661 370 399 Euro</td>
</tr>
</tbody>
</table>

2) ERC Advanced Grant

<table>
<thead>
<tr>
<th>Call identifier: ERC-2011-AdG</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of publication: 2 November 2010\textsuperscript{15}</td>
</tr>
<tr>
<td>Deadline: 6 April 2011 (for the SSH Panels)</td>
</tr>
<tr>
<td>Indicative budget: EUR 661.4m from 2011 budget\textsuperscript{16}</td>
</tr>
</tbody>
</table>

ERC Starting Independent Researcher Grant and ERC Advanced Investigators Grant

European Research Council provides two grants for investigator-driven ‘frontier research’. SSH researchers can submit their projects in any topic provided that they are at or beyond the frontiers of knowledge, without regard for established disciplinary boundaries. ERC SSH panels are listed below:

**SH 1 Individuals, institutions and markets: economics, finance and management**

- SH1_1 Macroeconomics, growth, development, business cycles
- SH1_2 Microeconomics, institutional economics
- SH1_3 Econometrics, statistical methods
- SH1_4 Financial markets, banking and corporate finance
- SH1_5 Competitiveness, innovation, research and development
- SH1_6 Consumer behaviour, marketing


\textsuperscript{15} The call of ERC Advanced Grant will be opened on 2 November 2010.

\textsuperscript{16} Under the condition that the draft budget for 2011 is adopted without modifications by the budgetary authority
SSH Relevant topics in FP7 Areas other than Theme 8
Socio-economic Sciences and Humanities

SH1_7 Organization studies, strategy
SH1_8 Human resource management, employment and earnings
SH1_9 Public administration, public economics
SH1_10 Income distribution, poverty
SH1_11 International trade, economic geography

SH 2 Institutions, values, beliefs and behavior: sociology, social anthropology, political science, law, communication, social studies of science and technology

SH2_1 Social structure, inequalities, social mobility
SH2_2 Ageing, work, social policies
SH2_3 Kinship, cultural dimensions of classification and cognition, individual and social identity, gender
SH2_4 Myth, ritual, symbolic representations, religious studies
SH2_5 Ethnography
SH2_6 Globalization, migration, interethnic relations
SH2_7 Transformation of societies, democratization, social movements
SH2_8 Political systems, legitimacy of governance
SH2_9 Legal systems, constitutions, foundations of law
SH2_10 Private, public and social law
SH2_11 Global and transnational governance, international law, human rights
SH2_12 Communication networks, media, information society
SH2_13 Social studies of science and technology, S&T policies, science and society
SH2_14 History of science and technology

SH 3 Environment and Society: environmental studies, demography, social geography, urban and regional studies

SH3_1 Environment and sustainability
SH3_2 Environmental regulation and mediation
SH3_3 Social and industrial ecology
SH3_4 Geographical information systems, cartography
SH3_5 Human and social geography
SH3_6 Spatial and regional planning
SH3_7 Population dynamics
SH3_8 Urbanization and urban planning, cities
SH3_9 Mobility and transportation

SH 4 The Human mind and its complexity: cognition, psychology, linguistics, philosophy and education

SH4_1 Evolution of mind and cognitive functions, animal communication
SH4_2 Human life-span development
SH4_3 Neuropsychology and cognitive psychology
SH4_4 Clinical and experimental psychology,
SH4_5 Formal, cognitive, functional and computational linguistics
SH4_6 Typological, historical and comparative linguistics
SH4_7 Acquisition and knowledge of language: psycholinguistics, neurolinguistics
SH4_8 Use of language: pragmatics, sociolinguistics, discourse analysis
SH4_9 second language teaching and learning, language pathologies, lexicography, terminology
SSH Relevant topics in FP7 Areas other than Theme 8
Socio-economic Sciences and Humanities

SH4_10 Philosophy, history of philosophy
SH4_11 Epistemology, logic, philosophy of science
SH4_12 Ethics and morality, bioethics
SH4_13 Education: principles, techniques, typologies

SH 5 Cultures and cultural production: literature, visual and performing arts, music, culture, and comparative studies

SH5_1 Classics
SH5_2 History of literature
SH5_3 Literary theory and comparative literature, literary styles
SH5_4 Textual philology and palaeography
SH5_5 Visual arts
SH5_6 Performing arts
SH5_7 Museums and exhibitions
SH5_8 Numismatics, epigraphy
SH5_9 Music and musicology, history of music
SH5_10 History of art and architecture
SH5_11 Cultural studies, cultural diversity
SH5_12 Cultural memory, intangible cultural heritage

SH 6 The Study of the human past: archaeology, history and memory

SH6_1 Archaeology, archaeometry, landscape archaeology
SH6_2 Prehistory and protohistory
SH6_3 Ancient history, ancient cultures
SH6_4 Medieval history
SH6_5 Modern and contemporary history
SH6_6 Colonial history, entangled histories, global history
SH6_7 Military history
SH6_8 Historiography, theory and methods of history
SH6_9 History of ideas, intellectual history
SH6_10 Social, economic, cultural and political history
SH6_11 Collective memories, identities, lieux de mémoire, oral history
SH6_12 Cultural heritage
III. People Specific Programme\textsuperscript{17}

The aim of the People Programme is strengthening the human potential in research and technology in Europe. There are five actions in this programme addressing researchers from all disciplines and sectors and career stages. People actions that SSH researchers can also apply are as follows:

**Activity 1: Initial training of researchers to improve mostly young researchers** career perspectives in both public and private sectors, by broadening their scientific and generic skills, including those related to technology transfer and entrepreneurship.

- **Call identifier:** FP7-PEOPLE-2011-ITN
- **Date of publication:** 20 July 2010
- **Deadline:** 26 January 2011
- **Indicative budget:** € 318 410 000

**Activity 2: Life-long training and career development** to support experienced researchers in complementing or acquiring new skills and competencies or in enhancing inter/multidisciplinarity and/or intersectoral mobility, in resuming a research career after a break and in (re)integrating into a longer term research position in Europe after a transnational mobility experience.

**MARIE CURIE RE-INTEGRATION GRANTS (RG)**

- **Call identifier:** FP7-PEOPLE-2010-RG
- **Date of publication:** 09 October 2009
- **Deadline:** 07 September 2010 at 17:00 (Brussels local time)
- **Indicative budget:** € 32 000 000

**Activity 3: Industry-academia partnerships and pathways** to stimulate intersectoral mobility and increase knowledge sharing through joint research partnerships in longer term co-operation programmes between organisations from academia and industry, in particular SMEs and including traditional manufacturing industries.

\textsuperscript{17} For more information please see \url{http://cordis.europa.eu/fp7/people/home_en.html}
MARIE CURIE INDUSTRY-ACADEMIA PARTNERSHIPS AND PATHWAYS (IAPP)

Call identifier: FP7-PEOPLE-2011-IAPP  
Date of publication: 20 July 2010  
Deadline: 07 December 2010  
Indicative budget: € 80 000 000

Activity 4: International dimension to contribute to the life-long training and career development of EU-researchers, to attract research talent from outside Europe and to foster mutually beneficial research collaboration with research actors from outside Europe.

MARIE CURIE IOF INTERNATIONAL OUTGOING FELLOWSHIPS FOR CAREER DEVELOPMENT (IOF)

Call identifier: FP7-PEOPLE-2009-IOF  
Date of publication: 17 March 2010  
This call was closed on 17 August 2010  
Indicative budget: EUR 28 Million

MARIE CURIE IIF INTERNATIONAL INCOMING FELLOWSHIPS (IIF)

Call identifier: FP7-PEOPLE-2010-IIF  
Date of publication: 17 March 2010  
This call was closed on 17 August 2010  
Indicative budget: EUR 28 Million

INTERNATIONAL RESEARCH STAFF EXCHANGE SCHEME (IRSES)
The International Staff Exchange Scheme aims to strengthen research partnerships through staff exchanges and networking activities between European research organisations and selected third countries.

There is no open call under this funding scheme.

Activity 5: Researchers' Night

This action aims to bring the researchers closer to the public at large, so enhancing their role in the mainstream of society. The purpose is to tackle the existing stereotypes about researchers and the profession, and to have the public at large better understand the central role of scientists and the key benefits they bring to society. An additional impact should be to convince young people that scientific careers are fascinating and to stimulate them to embark on scientific careers with mobility.

There is no open call under this funding scheme.
IV. Capacities Specific Programme\textsuperscript{18}

1. SSH Relevant Topics in the Research Infrastructures Work Programme\textsuperscript{19}

<table>
<thead>
<tr>
<th>Call identifier: FP7-INFRASTRUCTURES-2011-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of publication: 20 July 2010</td>
</tr>
<tr>
<td>Deadline: 25 November 2010</td>
</tr>
<tr>
<td>Indicative budget: EUR 163.45 Million</td>
</tr>
</tbody>
</table>

Social Sciences and Humanities relevant topics in this call (call N° 8):

INFRA-2011-1.1.1. Language Resources and Tools for cross-disciplinary research in social sciences and humanities

A project under this topic must provide harmonized access to the existing language resources and tools in Europe for European research in the humanities and social sciences. It should aim to integrate these language resources and tools with a long term perspective. It is expected that such a project will be organized in coordination with the Common Language Resources and Technology Infrastructure (“CLARIN”) and will contribute to the structuring of this infrastructure.

INFRA-2011-1.1.2. European Data Infrastructure for multidisciplinary research in the socio-economic behaviour of individuals and households, related to sustainability policy, climate change policy and environmental risk

A project under this topic should aim to integrate, with a long term perspective, the large scale and longitudinal data infrastructures in Europe, which provide information on the social, economic and general well-being of individuals and households. Linking these structures at the most detailed level to indicators of energy consumption, transport, environmental conditions, waste recycling will provide researchers with the high quality European comparative data, needed to investigate the drivers of changes in behaviour in Europe, and which is critical to progress in these areas. It is expected that widespread access of researchers to these integrated longitudinal datasets will be ensured through the Council of European Social Science Data Archives (“CESSDA”).

INFRA-2011-1.1.3. Integrating Digital Archives and Resources for Research on Medieval and Modern European History.

A project under this topic must provide and facilitate access to the existing archives and resources in Europe for the study of medieval and modern European History. It should aim to integrate these facilities and resources with a long term perspective. It is expected that such a project will be organised in coordination with the Digital Research Infrastructure for the Arts

\textsuperscript{18} For more information please see: http://cordis.europa.eu/fp7/capacities/home_en.html
\textsuperscript{19} For more information please see: http://cordis.europa.eu/fp7/capacities/research-infrastructures_en.html
and Humanities ("DARIAH") and will contribute to the structuring of this infrastructure.

**INFRA-2011-1.1.4. Integrating Archives for research on Contemporary European Social History.**

A project under this topic must provide and facilitate access to the data collections and services in Europe for the study of the Contemporary European Social History. It should aim to integrate these archives with a long term perspective. It is expected that widespread access of researchers to these distributed data collections and material will be ensured through the linking of these services with the Council of European Social Science Data Archives ("CESSDA") and the Digital Research Infrastructure for the Arts and Humanities ("DARIAH").

**1.1.2 ICT-based e-Infrastructures**

The e-Infrastructures activity supports a number of interrelated topics designed to foster the emergence of new research environments in which 'virtual communities' of scientists and engineers are empowered to share and exploit the collective power of the European ecosystem of scientific and engineering facilities. Such topics in 2011 address the deployment of e- Science environments based on the seamless integration of underlying e-Infrastructurte technology layers and services; and the support to advanced data infrastructures building on earlier efforts and putting new emphasis on the whole data life cycle, from data curation and preservation to interoperability and open access, and on service deployment and tools. Activities related to socio-economic impact assessment and evaluation should be also foreseen where appropriate.

Projects must implement (i) **Networking Activities**, (ii) **Service Activities** and (iii) **Joint Research Activities** in a closely coordinated manner following the Integrated Infrastructures Initiative model (see section VII).

It is clarified that this action invites proposals aimed primarily at the development and deployment of e-Infrastructures and not at the construction of ESFRI projects as such, which are addressed under topics INFRA-2011-2.3.1 to INFRA-2011-2.3.3. Proposers pursuing the implementation of ESFRI infrastructures should consult section 1.2.3 of this document. In any case e-Infrastructure and ESFRI infrastructure stakeholders are encouraged to interact as appropriate.

**1.2.2 Construction of new infrastructures (or major upgrades) - preparatory phase**

The purpose of this activity is to provide catalytic and leveraging support for the preparatory phase leading to the construction of new research infrastructures or major upgrades of existing ones. The preparatory phase aims at bringing the project for the new or upgraded facility/research infrastructure to the level of legal and financial maturity required to implement it.

The preparatory phase may also include technical work. Project consortia should involve all the stakeholders necessary to make the project move forward, to take decision and to make financial commitments before construction can start (e.g. national/regional ministries/governments, research councils, funding agencies). Appropriate contacts with Ministries and decision makers should be continuously reinforced allowing further strengthening of the consortia. Operators of research facilities, research centres, universities, and industry may also be involved whenever appropriate. During the preparatory phase the European Commission may act as a "facilitator", in particular with respect to the financial engineering needed for the construction phase. The preparatory phase could include (non
- Management and logistical work, i.e. (1) plans, in terms of construction (or major upgrade) and operation of the new research infrastructure; (2) planning (timing, resources) of staff recruitment to operate the new facility; (3) organisation of the logistic support for researchers, including informatics, etc.;

- Governance work, i.e. plans, in terms of decision-making, management structure, advisory body, IPRs, access rules for researchers, etc.;

- Financial work, i.e. (1) the financial arrangements for the construction, operation and decommission of the facility, using notably the complementarities between national and EU instruments (such as the Structural Funds or the European Investment Bank); (2) studying new mechanisms, e.g. pre-commercial procurement processes, by which public authorities may develop new approaches for financing innovative solutions;

- Legal work, i.e. (1) for the setting-up, construction and operation of the research infrastructure; and (2) the draft agreement between committed countries, in the form of a 'signature-ready' document for the setting-up and the actual construction.

- Strategic work, i.e. (1) analysis of the socio-economic impact of the new infrastructure; (2) the plan to integrate harmoniously the new infrastructure in the European fabric of related facilities in accordance, whenever appropriate, with the EU objective of balanced territorial development; (3) to create or consolidate centres of excellence and/or "regional partner facilities"; (4) the identification of the best possible site to set up the new facility(-ies) and its next generations;

- Technical work, i.e. (1) final prototypes for key enabling technologies and implementation plans for transfer of knowledge from existing prototypes to the new research infrastructure; (2) 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.
2. SSH Relevant Topics in the Research for the benefit of SMEs\textsuperscript{20} Work Programme

<table>
<thead>
<tr>
<th>Call identifier: FP7-SME-2011-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of publication: 20 July 2010</td>
</tr>
<tr>
<td>Deadline: 8 December 2010 at 17.00 Brussels local time</td>
</tr>
<tr>
<td>Indicative budget: EUR 110 Million</td>
</tr>
<tr>
<td>Topic: the call is open to all research fields</td>
</tr>
</tbody>
</table>

This call is open to all research fields. Therefore there are no specific topics mentioned here. Please consult the Work Programme.

\textsuperscript{20} For more information please see: http://cordis.europa.eu/fp7/capacities/research-sme_en.html
3. SSH Relevant Topics in the Research Potential of Convergence Regions Work Programme\textsuperscript{21}

<table>
<thead>
<tr>
<th>Call identifier: FP7-REGPOT-2011-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of publication: 20 July 2010</td>
</tr>
<tr>
<td>Deadline: 07 December 2010 at 17.00 Brussels local time</td>
</tr>
<tr>
<td>Indicative budget: EUR 64.68 Million</td>
</tr>
</tbody>
</table>

This call is open to all research fields. Therefore there are no specific topics mentioned here. Please consult the Work Programme.

\textsuperscript{21} For more information please see \url{http://cordis.europa.eu/fp7/capacities/convergence-regions_en.html}
4. SSH Relevant Topics in the Regions of Knowledge

Work Programme

Call identifier: FP7-REGIONS-2011-1
Date of publication: 20 July 2010
Deadline: 9 December 2010 at 17.00 Brussels local time
Indicative budget: EUR 18,66 Million

Topic: REGIONS-2011-1

Technical content/scope
In the 2011 call, proposals shall support sustainable economic development, including through supporting green transport systems as defined by the Lead Market Initiative, by boosting the competitiveness of transport-related economy. The overall objective is to support the innovative capacity of European transport-related Industries and businesses. It should promote sustainable transport in an integrated, technology-led and user friendly way which can contribute to regional and local development. Projects should favour innovative and cross-disciplinary approaches, smart specialization and implementation, focusing for example on greening of transport, development of intermodal regional transport, urban mobility or safety and security.

Type of activities/work
The activities listed on page 7 of this Work Programme and linked to the area of Transnational cooperation will be implemented through "Coordination and Support Actions" (Coordinating Action (CSA-CA)), which will support projects covering all of the following steps:

. Analysis and integration of research agendas of actors in regional clusters
Project partners will perform a detailed analysis of the state of play of the identified research-driven clusters and of additional regional capabilities around which research could be carried out. For the selected topic, the analysis shall involve the identification of relevant issues and components, including:
o The existing regional RTD policies, plans and activities, their evolution and their impact;
o Regional public and private RTD actors, including financial ones (e.g. banks, business angels), and infrastructure and facilities;
o The strengths and weaknesses of the regions concerned in terms of their capacity to produce, transfer and use knowledge;
o The existing regional cluster policy and initiatives;
o Economic development strengths, opportunities and needs, and economic development policies;
o European and international context, with a reference to possible links to existing European Technology Platforms, Joint Technology Initiatives or other European projects.

This analysis shall cover the possibilities of synergies and opportunities for mutual learning and exchange of best practices as well as possibilities of mentoring (mandatory) for capacity building, with identification of the targeted emerging European clusters, if not already

22 For more information please see: http://cordis.europa.eu/fp7/capacities/regions-knowledge_en.html
identified in the proposal12, and of cooperation possibilities between the regional actors involved in regional research-driven clusters. It can also cover the preparation of an international cooperation strategy, with the identification of potential targeted clusters from third countries13 and of cooperation possibilities in RTD and innovation support services with these clusters.

It shall be made with the involvement of local stakeholders concerned as part of the consensus building and dissemination processes around the project. The output shall be a directory of RTD offer and demand, a global analysis including an analysis of Strengths, Weaknesses, Opportunities and Threats (SWOT) from an economic and R&D perspective and an analysis of the complementarities of the partners involved in the consortium for the particular scientific and technological domain or economic sector targeted by the project. It shall also include an analysis of the complementarities of the emerging European clusters targeted for mentoring activities and, where appropriate, of the third country clusters targeted for international cooperation.
5. SSH Relevant Topics in the Science in Society Work Programme

Call identifier: FP7-SCIENCE-IN-SOCIETY-2011-1
Date of publication: 20 July 2010
Deadline: 20 January 2011 at 17.00 Brussels local time
Indicative budget: EUR 43 Million

SiS.2011.1.0-1 Mobilisation and Mutual Learning (MML) Action Plans on societal challenges

Context: The Europe 2020 Strategy for smart, sustainable and inclusive growth stresses the importance of coordinated European response to current challenges faced by society, including social partners and civil society. This Strategy also identifies innovation and research as one of the key components for "smart growth". In this perspective the European Research Area is targeting efforts in research and innovation on the current challenges faced by society. The MML Action Plans contribute to this perspective by encouraging partnerships between research organisations and societal actors.

Objectives: To create mechanisms for effectively tackling the scientific and technology-related challenges faced by society by proactively bringing together different actors with complementary knowledge and experiences. The Mobilisation and Mutual Learning Action Plan (MMLAP) therefore forges partnerships between research organisations and different societal actors. It develops forms of dialogue and cooperation between science and society at different stages of the research process. The partners pool experiences and knowledge and better focus their respective efforts to develop a common approach to the issues at stake. In doing so the MMLAP contributes to sharing innovation more widely and efficiently and to optimising the role of research and technology in tackling societal challenges.

Societal challenges and related research: The MML Actions Plan proposed under this topic must address one of the following Specific Challenges that are relevant to the Europe 2020 Strategy and where a more structured dialogue and cooperation between research organisations and other stakeholders is sought. The proposal must state clearly which Specific Challenge it addresses:

Specific Challenge 1: Moving towards a low-carbon society

The overarching rationale for developing low carbon energy technologies, including carbon capture and sequestration technologies, is well established: we must find "cleaner" energy sources and ways for dealing with their potential environmental impacts. However, the technological solutions that are proposed might not be considered desirable in the specific...
environments in which they could be deployed. Technologically appealing solutions might miss key socio-economic considerations and elicit public hostility or disinterest. Understanding the nature of various public concerns (e.g. environmental, ethical, economic, cultural...), and taking on board legitimate expectations should influence the relevant research and lead to more broadly acceptable solutions.

Specific Challenge 2: A food dilemma: are technological innovations and health concerns reconcilable?

The food sector is key in Europe, integrating many technological innovations. Trends in food and nutrition contribute to an increase in the prevalence of chronic conditions (e.g. obesity, cardiovascular diseases, diabetes and allergies) and impact negatively on health and quality of life. This fosters the move from a dominant curative approach to a preventive one, with among others the blossoming of nutrition and health claims made on foods and the development of new technologies. It raises many questions and affects the food and health research landscape, calling for new alliances with other disciplines. How can food innovation and, in particular, new technologies be directed in a more sustainable and healthy way? How can new technologies, such as imaging and "omics" technologies, improve insight into the relationships between food, nutrition and health? This requires pooling various types of knowledge together, making them more widely accessible and fostering more in-depth debate between researchers, the medical profession, the food producing and processing industry, regulators, consumers, patients, citizens, etc.

Specific Challenge 3: Marine resources, inland activities and sustainable development

The European Strategy for marine and maritime research highlights the need for an integrated approach as regards the marine system to support the development of a thriving maritime economy, in an environmentally sustainable manner. It encourages capacity-building, an increase in integration between established research disciplines and improved cooperation between all the stakeholders concerned with seas, oceans and coasts. Furthermore, under the Marine Strategy Framework Directive the Member States will have to report on the environmental status of their seas and set up action plans to reach a "Good Environmental Status". Land-based activities are essential for the socio-economic development of coastal regions but they can also have detrimental impacts on the marine environment and biodiversity as well as on coastal areas affecting for example tourism, aquaculture or coastal fishing. The issues are complex and too often dealt with separately, while an integrated approach to coastal management, covering both land and sea parts, is necessary. They involve research from different disciplines which may not be sufficiently connected. They concern actors such as farmers, the chemical industries, environmental organisations, local authorities — who may have very different and even conflicting perspectives.

Participants: The project partners should include research organisations and civil society organisations (CSOs) as well as other types of actors from different perspectives as relevant for the selected Specific Challenge such as:
- Cities and local / regional or national authorities
- National or regional parliamentary advisory offices for science and technology
- Research funding agencies
- Private organisations conducting research
- Education establishments
- Science academies

- Museums, science centres and science festivals
- Media organisations,
- Professional organisations
- Businesses.

The proposal should ensure a balanced distribution of roles and responsibilities between the different types of participants. The budget should reflect this distribution and include financial means to permit the appropriate participation of all participants.

**Large Consortia:** Experience has shown that as the number of partners (beneficiaries indicated in part A of the proposal) in a proposal increases, often exceeding 20, the organisational aspects of the proposed work and strong management capabilities from the coordinating entity become critical factors in the likely success of the project. This aspect will be taken into account in particular under the second evaluation criteria "Quality and efficiency of the implementation and management"

**SiS.2011.1.1.1-1: Involvement of civil society organisations in research**

Civil society organisations (CSOs) are playing a growing part in research activities to various degrees in Europe and contribute to the democratisation of research. The Seventh Framework Programme encourages the involvement of civil society actors at different stages of the research process: designing research agenda, undertaking research, using and assessing research results. Experimental cooperative research projects which bring together academic researchers and civil society organisations are developing in various domains.

This topic aims at better understanding the dynamics at play and investigating the characteristics of CSOs which participate in research, of the new partnerships they are developing with research organisations and the influence that these developments have on scientific research and research policy.

Proposals should address at least two of the three following issues:

1. **Knowledge and research potential:** which may include the different knowledge bases of CSOs; modes of knowledge management and capitalisation on research results; comparing values of CSOs in relation to research and knowledge production with those of academic researchers, etc

2. **Research processes involving CSOs:** which may include the respective roles of researchers and CSOs that enter research partnerships; similarities/differences between research performed within such partnerships and research undertaken only by researchers; differences and similarities in terms of time constraints and time frames; benefits of such partnerships and institutional incentives and measures for researchers to work with CSOs (including in terms of career development); perceptions of such partnerships at local and/or national level and EU level, etc.

3. **Interaction between these cooperative research processes and research policy:** which may include aspects and impacts of various modes of joint participation of CSOs and researchers (i.e. foresight, technology assessment, research prioritisation processes; agenda-building platforms, co-production of knowledge) on research policy-making; policies of universities and research organisations which aim to promote such partnerships.

Please note that the scientific and/or technological excellence evaluation criterion will include...
the following sub-criterion: "appropriate comparative perspective in relation to the proposed research". The identification of innovation and best practice should also be taken into account in relation to this comparative perspective.


Description of topic: Societal tensions relating to emerging S&T (Science and Technology) developments are often due to differences in the perception of their impacts through different formal or informal assessment frameworks, such as Technology Assessments, Risk Assessment, Impact Assessment, Foresight, Ethical Reviews, media analysis or public perceptions, etc. Reflections on these assessments of the implications of new S&T developments are today progressing rapidly. They are rendered more complex by tentative integration of so-called non-economic aspects that have been ignored in the past such as environmental damage, health, natural and cultural resources, quality of life, etc., due to the difficulties in setting an economic value on them. These non-economic dimensions are actually taken up by various national, European and international reflections on measuring the progress of society (such as quality of life indexes).

Policy makers should be encouraged to take into greater account the latest thinking on these issues, including non-economic considerations, in order to better reflect the reality of how today's knowledge society is developing. The current Knowledge Assessment frameworks, that is frameworks conducive to an assessment of specific advances in science, technology and innovation, are no longer sufficient for debating and shaping the next waves of innovations and further areas where research is urgently needed. Researchers supported under this topic should investigate ways of integrating all these Knowledge Assessment methods into an anticipatory approach to science, technology, innovation and Knowledge Societies progress.

Please note that the scientific and/or technological excellence evaluation criterion will include the following sub-criterion: "appropriate comparative perspective in relation to the proposed research".

SiS.2011.1.1.1-5 A Forward Look at new ways of doing and organising research in our knowledge societies

In its Conclusions of 8 December 2009, the Competitiveness Council stressed that in order "to address these [grand] challenges, it is essential to mobilise industry and knowledge building institutions of different scales, as well as civil society at large, through both top down and bottom-up approaches" and it invites to initiate during 2010: [...] "forward-looking activities ("foresight") to support the identification of grand challenges and the corresponding priorities for research and innovation". At the same time, the Europe 2020 strategy calls for an "efficient, effective and well-resourced European Research Area (ERA)" that should foster innovation and creativity.

Action under this topic should make a complete stock-taking of recent and ongoing Forward looking exercises on new ways of carrying out Research, Technology Development and Innovation in universities, research organisations, companies and civil society, in the EU and its Member States including their methodological background and usefulness for policymaking. In addition a comparison with international Forward looking exercises should be made. This CSA should also identify trends and drivers in the way research, technological development and innovation operate in our societies, setting up a number of scenarios for its evolution towards 2030. Trends in the field of gender equality, participation of society in
defining research directions, open access to and communication of scientific results, interdisciplinarity of research in motion (e.g. social sciences and ethics embedded in natural sciences research projects), extended peer review, partnerships between civil society organisations and research teams, new (societal) impact assessment processes, etc, are examples of trends and drivers to be taken into account in this exercise.

**SiS.2011.1.3.1-1 Reinforcing European strategies on access, dissemination and preservation of scientific information in the digital age**

**Description of topic:** Prompted by the Commission Communication on *scientific information in the digital age: access, dissemination and preservation*\(^1\), Member States made a strong commitment to take concrete steps towards improving access to and dissemination of scientific information. The Council invited in particular Member States to *"reinforce national strategies and structures for access to and preservation and dissemination of scientific information, tackling organisational, legal, technical and financial issues [and] enhance the co-ordination between Member States, large research institutions and funding bodies on access, preservation and dissemination policies and practices*\(^1\). A Digital Agenda for *Europe*\(^1\), the strategy for a flourishing digital economy by 2020, also addresses the issue of dissemination of publicly funded research through Open Access publication of scientific data and papers.

In 2009, the European Commission noted that many valuable activities to promote "Open Access" were underway in the Member States, but that there was a *"need to capitalise on these existing activities in order to move towards convincing and robust national and European strategies on access, dissemination and preservation in the digital age"*\(^1\).\(^9\).

This topic supports actions aimed at co-ordinating research activities and policies to reinforce the existing national strategies and structures, and contribute to the development of new ones. New initiatives can be built on a thematic and/or geographical basis. Actions may include the organisation of events, exchange and dissemination of good practices, or the definition, organisation and management of joint or common initiatives and/or policy activities (without funding research as such). Target groups are the full range of institutions and organisations in EU Member States and Associated Countries that address and/or co-ordinate policies and activities relating to access to scientific information, e.g. ministries, funding bodies, universities, libraries, associations, CSOs etc.

**Note:** Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria. Please also refer to the call fiche for details of these limits.

**SiS.2011.1.3.4-1 Clusters of cities of scientific culture for innovation**

**Description of topic:** The purpose of this topic is to highlight and promote actions which demonstrate how developments in science and technology can stimulate innovation in the creative sector, and how the creative sector itself can stimulate the emergence of new forms of creativity and innovation in science and technology. This topic aims to highlight this aspect of the reciprocal influence of science (and technology) and culture against the background of promoting new forms of innovation.

**Background:** European policy makers have recognised the importance of culture as a catalyst for creativity and innovation, and the European Ambassadors for Creativity and Innovation recommended actions to build new bridges between science, art, philosophy, and business to stimulate innovation in the so-called creative sector. The economically important creative sector is generally associated with cultural activities (e.g. the arts, media, music,
exhibitions and events) or with the creative expression of ideas and concepts (e.g. design, architecture, software development for entertainment, sports and leisure products).

Content: Each project should construct an Action Plan covering the (required) three-year duration of the proposed project. This Action Plan will be implemented on two levels in order to make a distinction between activities that take place at the local level and those that take place at the European level.

The Action Plan will contain networking activities such as exchange of experience and knowhow, mutual peer-learning activities, and associated supporting activities such as workshops or conferences or seminars, that are foreseen at the European level, as well as general dissemination and awareness raising activities (usually at a lower level) aimed at a broader public and that highlight the creative and cultural impact of science and technology. Although the Plan should identify or define the local activities that are being or will be implemented, the costs incurred for local activities will be eligible for support under this topic only if they are new activities to be implemented jointly through cooperation at the European level under the proposed Plan.

Although the Action Plan is to be defined at the proposal stage, a review point should be foreseen half way through its implementation so that experience gained can be used to enhance the intended impact of the implemented activities. Each of the specific activities implemented under the plan should simultaneously demonstrate the interplay between Science and Technology (S&T) and cultural and creative activities mediated through the processes of mutual innovation (as described above) as well as raising awareness of this interplay among a broad public. This target public can include teachers and educators (at all levels), careers advisers, youth and voluntary organisations, clubs, societies, cultural centres and organisations.

The types of activities to be included in the Action Plan could include (non-exhaustive list):

- Speculative design-led projects involving collaboration between artists, designers, scientists and or technologists;
- Joint projects between schools, educational and research entities, local science centres museums and local employers that demonstrate a broad use of science and technology in non-academic settings;
- Activities that highlight how S&T is being used to protect cultural heritage and make it more accessible to all.

This topic complements the topic in the 2009 Science in Society work programme, which aimed to establish a platform of networks grouping science museums organisers of science events and cities.

Participants: The Action Plan proposed should bring together at the European level partners who are mobilising or are able to mobilise a diverse range of actors at the local level. The full partnership in the network should, however, demonstrate how it is or will be able to mobilize the different stakeholders as appropriate in each of the activities covered under the Plan.

SiS.2011.2.1.1-1 Implementing structural change in research organisations/universities

Actions on gender equality in FP6 were mainly focused on women scientists and how their role and image could be strengthened, through ambassadors' schemes, mentoring activities, networking efforts, etc. While some of these actions have been very visible at the political level and have had good impact on decision-makers, longer-lasting change is needed. The
overall objectives have always been to attract more women into science, mathematics, engineering and technology and, once there, to retain them by improving their workplace experience and by addressing the factors that lead to frustration and the rejection of long term careers.

In FP7, the Commission introduced a change in focus from women scientists to the institutions that employ them, to encourage them to change their working environment and culture to better support gender diversity. In 2007 the Commission financed a survey of current best practices and produced guidelines to implementing such changes. In 2008, two pilot projects were selected to implement such structural change; the 2009 SiS work programme contained a topic aimed at encouraging a wide-ranging debate on these issues with all major actors, especially human resource departments or personnel managers. In 2010 the practical implementation of the needed structural change was launched. This strategy will be developed further in 2011.

This topic will, therefore, support cooperation between research organisations/universities centred on common actions to implement the best systemic organisational approaches to increasing the participation and career advancement of women researchers. Proposals should include research organisations/universities which have already implemented proven and efficient actions on gender-aware management, as well as others who are seeking to gain experience in this area.

Proposals should contain a convincing self-tailored action plan per each participating institution aiming at implementing the necessary structural changes on the basis of each specific challenges and problems. Each self-tailored action plan will be accompanied by an implementation roadmap. In this preparation, the less gender-aware institutions will benefit from the experience of the others, while those with experience could improve their current approach - by involving gender management experts, for instance. The learning process deriving from the expertise exchange from one institution to another will be considered in the evaluation process.

Consideration should be given to the involvement of local or national social partners (trade unions and/or employers' associations), where appropriate. Work to be carried out under the project will therefore consist of the identification and comparison of the best instruments to tackle specific already identified problems, and the development and implementation of tailored multi-annual action plans. These action plans should involve activities which address issues such as (non-exhaustive list):
- Recruitment, promotion, retention policies
- Updated management and research assessment standards
- Course content development
- Leadership development
- Supporting policies for dual career couples
- Returning schemes after career breaks.

The proposal should include and describe a methodology for impartially assessing the actions implemented, throughout the duration of the project, in relation to their objectives and expected impacts.

Final procedural guidelines for other institutions interested in similar structural approaches should be prepared and disseminated. Dissemination activities at regional, national and/or international level should also be included in the proposal. The purpose of the action plans is to provide a management tool to help implement real change which will be of mutual benefit to the institutions concerned and to the career development of women researchers. In consequence, the proposal should also include sufficient evidence that the plans will be
implemented in the medium to long term, and that, to this end, the proposed activities have the full support of the management structures at the highest levels of these institutions. This aspect will be considered during the evaluation process.

**SiS.2011.2.2.1-1 Supporting and coordinating actions on innovative methods in science education: teacher training on inquiry based teaching methods on a large scale in Europe**

Proposers are recommended to read the report *'Science Education Now; A Renewed Pedagogy for the Future of Europe'*²⁶.

Falling interest in key science topics and mathematics has been linked to the way they are taught from the earliest age. Therefore, greater emphasis needs to be placed on the development of more effective forms of pedagogy; on the development of analytical skills; and, on techniques for stimulating intrinsic motivation for learning science, taking into account various pre-conditions and cultural differences.

This topic will support actions to promote the more widespread use of problem and inquiry based science teaching techniques in primary and/or secondary schools as well as actions to bridge the gap between the science education research community, science teachers and local actors in order to facilitate the uptake of inquiry-based science teaching. The actions are intended to complement school science curricula and should particularly focus on teacher training activities and the promotion of European teachers' networks. The actions proposed should be open to the participation of entities seeking to gain experience in the area of problem- and inquiry based science education techniques.

The training of the teachers should include actions that contribute towards the following: securing basic knowledge, developing a task culture, learning from mistakes, cumulative learning, autonomous learning, experiencing subject boundaries and interdisciplinary approaches, differentiating between girls' and boys' interests and promoting pupils' cooperation. The actions aimed at here shall already have proven their efficiency and efficacy. Furthermore, training activities should be realistic and feasible in terms of the participation of teachers and the opportunities offered to them by their employers or education authorities. If the proposed training activities are to take place outside of normal school hours, measures to facilitate participation should be considered. The corresponding impact on the grant support requested should be identified.

Projects are expected to have a broad coverage of EU Member States and Associated Countries - in order to generate a European impact (see also under 'Additional eligibility criteria below, as well as in the Call Fiche). In addition to this during contract negotiation links will be established between financed projects and SCIENTIX - The Community for Science Education in Europe (www.scientix.eu)³¹. The following special clause 40 will therefore be included in the grant agreement of each project selected for funding: "The Commission shall be authorised to publish any foreground disseminated by the consortium in whatever form and on or by whatever medium, in particular via a European level information provider on its behalf. To enhance the accessibility of this foreground for third parties, it may adapt such foreground in any manner, including by making translations thereof. Any third party shall be allowed to utilise this published foreground for free for non-commercial educational purposes. To ensure the above, the consortium, acting through the coordinator, shall upon dissemination of any foreground provide the Commission with an electronic copy thereof and shall upon dissemination of any foreground provide the Commission with an electronic copy thereof and

shall ensure that any necessary authorisations have been obtained and that it has not accepted legal obligations which could conflict with this clause”.

The proposal should include and describe a methodology for impartially assessing the actions implemented, throughout the duration of the project in relation to their objectives and expected impacts.

Note: Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria. Please also refer to the call fiche for details of these limits

SiS.2011.2.2.3-1 Science and mathematics related activities carried out in pre-school and in the first years of primary schools: their link to the development of creative skills.

Evidence suggests that creativity declines in people as they go through the education system. Traditional schooling has been mainly about teaching and testing, producing knowledge and skills for a model of industrial society which is now declining, while on the other hand the inventiveness, imagination, intuition, wonderment and curiosity, which is innate in young children, becomes stifled. These qualities of mind are vital for innovation and creativity and for economic and social progress. This perception is perhaps at its most acute in relation to the teaching and learning of science and mathematics, where a more creative approach based on curiosity and inquiry would be beneficial in particular starting from very early age.

Although examples of innovative pedagogies do exist in this field, a major shift of education culture and practices is needed in order to adapt to the challenges of the today changing world. This should include a move away from the pedagogy of the "correct answers", which make pupils believe that it is wrong to be wrong, therefore they become progressively less willing and able to take risk and to unlock creativity. Teachers need to be encouraged toward a more creative teaching. In addition, new modes if interactions within the classroom need to be developed in order to stimulate self-expression, which if nurtured, could manifest itself subsequently in later years in terms of an ability to create and innovate. This in turn will have major implications for curricula, pedagogy, teacher training and classroom interaction. The research project will carry out a mapping and comparative assessment of existing approaches to the teaching and learning of science and mathematics on pre-school and until the first years of primary school (up to the age of 8) in a representative sample of Member States and Associated Countries. "Existing approaches" refers to activities aimed at exposing children to experiences related to maths and science, the related objectives, expected results and assessment methodologies.

This includes also interdisciplinary and cross-curricular activities when involving science and maths. The research project will moreover provide an analysis of the implications of the different approaches for children's creativity, for the emergence or appropriate learning outcomes in science and maths and for attracting the interest of children to science and maths avoiding the emergence of misconceptions and stereotypical images. Gender, socio-economical and cultural issues should be taken into account. The analysis should also be based on the most recent outcomes of cognitive psychology. The actions should include policy recommendations, appropriate dissemination activities and guidelines for teacher training..

Please note that the scientific and/or technological excellence evaluation criterion will include the following sub-criterion: "appropriate comparative perspective in relation to the proposed research".
SiS.2011.2.2.3-2 European events to bring together young researchers with distinguished scientists as role models.

The aim is to stimulate interest in research careers in science and technology among students at university or in higher education institutes within EU Member States or Associated Countries, who are studying for a masters or doctoral degree or equivalent. The focus is on bringing them in direct contact with distinguished scientists, such as Nobel Prize laureates, so that they can gain useful insight and advice from those who are pursuing successful and rewarding careers.

Grant support will be offered to complement the costs of scientific gatherings that are already scheduled, and for which core funding has already been or will be secured from other sources, to help support the participation costs of selected students at such gatherings. The proposals should describe in detail the mechanisms through which the students will be able to meet and interact with distinguished scientists. Where such mechanisms are not already included in the programmes of the scientific gatherings the associated additional costs involved in organizing them may be eligible for support. The proposal should include plans to ensure that students from across Europe are made aware of the possibility to participate in such gatherings. The procedure for selecting candidates should be described and should respect the principles of transparency and fairness as well as ensuring a balanced participation in terms of country and gender. Consideration should also be given to the use of audiovisual and internet media as a means of broadcasting the meetings between the students and distinguished scientists to a wider public. In consequence, an appropriate communication strategy shall also be described, designed to ensure proper and full visibility to European Union Research policies and programmes and to the concrete opportunities offered to young researchers. It should include precise deliverables, to be implemented during the event, and in all communication activities and materials preceding and following the event.

Only one proposal covering three identified scientific gatherings taking place in 2011, 2012 and 2013 will be financed.

Please note that this call topic is open under a dedicated call for proposals: FP7-SCIENCEIN-SOCIETY-2011-EVENTS.

SiS.2011.3.0.6-1 Science-Society interaction in the digital technologies era

Description of the topic: Digital technologies are having a profound impact on access to science related information and the way that such information is shared and used. Digital technologies also allow a degree of direct, two-way interactivity between the scientific community and the publics that is not possible with traditional media such as television, radio and the press. In particular internet resources and tools such as "wikis", YouTube©, and FaceBook©, in other words Web 2.0, have enormous potential to reach out and engage the public in two-way communication on science and technology related issues. But are these tools being used to the best effect by the mainstream scientific community and the general public; and is the public able to discriminate between the types and quality of information posted?

The research proposed under this topic should therefore seek to assess the opportunities and risks in the use of the web and the social media as a meaningful information tool and for developing a participatory communication between scientists and the different publics. The research described in the proposal should ensure a broad European coverage and have an international perspective highlighting especially where lessons can be learned and where
successful and innovative communication initiatives exist and the extent to which they are integrated into the working environment of scientists and technologists. Furthermore, the research should identify the impact of the emerging communication technologies on public perception of and engagement with science. The research should use case studies on science and technology issues of topical interest and take into account the different publics (considering all socio-cultural issues).

The research proposed should contain an evaluation of current initiatives and analyse how it is expected to improve the current state of understanding of the field. The research should also address issues such as: how the "digital divide", how populations with limited access to the internet may as a result have reduced access to scientific information and culture and, more in general, what kind of critical capabilities and expertise is needed by the lay public to identify, understand and use reliable and useful information; what effect will the growth in digital technologies have on availability of information to the general public through more 'traditional' media?

The proposed consortium should comprise expertise from the scientific community, science communicators and media and should compare and contrast different approaches and disciplines also at international level.

Please note that the scientific and/or technological excellence evaluation criterion will include the following sub-criterion: "appropriate comparative perspective in relation to the proposed research".

**Note:** Limits on the EU financial contribution apply. These are implemented strictly as formal eligibility criteria. Please also refer to the call fiche for details of these limits.
6. SSH Relevant Topics in the International Cooperation (INCO)\textsuperscript{27}

Call identifier: FP7-INCO-2011-6-ERA WIDE

Date of publication: 20 July 2010

Deadline: 15 March 2011 at 17.00 Brussels local time

Indicative budget: EUR 15 Million

Activity 7.6 Reinforcing cooperation with Europe's neighbours in the context of the ERA (FP7-INCO-2011-6, ERA-WIDE)

The reinforcement of the cooperation with Europe's neighbours in the context of the European Research Area (ERA) is an important part of the EC communication on the Strategic Framework for international S&T cooperation\textsuperscript{28}. In order to promote closer scientific cooperation with the European Neighbourhood Policy (ENP) countries and to prepare their possible association to the Framework Programmes, dedicated activities aimed at improving the cooperation capacity of these countries should be carried out under the Specific International Cooperation activities of FP7. This should complement the Research and Innovation activities described in the National Indicative Programmes and covered by the European Neighbourhood and Partnership Instruments (ENPI).

Technical content/scope
The objective of this action is to reinforce the cooperation capacities of research centres located in the ENP countries, which are not associated to FP7 at the time of the publication of the call\textsuperscript{29}. The call will give these countries the possibility to improve the research activities of their highest quality and/or promising centres in a scientific field addressed by the thematic priorities of FP7.

Proposed activities
The activities covered by the call are:

\begin{itemize}
\item twinning with research centres in Member States or Associated Countries in view of exchanging knowledge and good practices, disseminating scientific information, identifying partners and setting up joint experiments through short-term visits or exchange of staff, meetings, seminars, and similar activities;
\item developing training modules to build competency and facilitate the participation of these centres in FP7;
\item developing research centres' strategy in order to increase their scope and visibility (regional coverage, activities), to develop comparative advantage and to improve their competitiveness by enhancing their responses to the socio-economic needs of their countries and of the region.
\end{itemize}

The ERA-WIDE activity does not support directly research work but contributes to improve

\textsuperscript{27} For more information please see INCO web page (http://cordis.europa.eu/fp7/capacities/international-cooperation_en.html)


\textsuperscript{29} The countries targeted by the call are: Morocco, Algeria, Tunisia, Libya, Egypt, Jordan, Palestinian Administered Areas, Lebanon, Syria, Moldova, Georgia, Ukraine, Belarus, Armenia, Azerbaijan
the centre's capacities in a given research area. The activities proposed should form a coherent plan and therefore they should be described in details and justified. Preference should be given to activities with a regional impact.