Annex B - Non-paper

2011 Science in Society Work Programme 11.02.2010

Action Line 1: A more dynamic governance of the science and society relationship

Topic: Mobilisation and Mutual Learning (MML) Action Plans: mainstreaming SiS actions in research

Objective: Under this topic, the objective of each project will be to bring together research organisations and a series of actors from wider society to develop and implement a joint Mobilisation and Mutual Learning (MML) Action Plan to shape research in new or emerging science and technology in response to the views and needs of society and citizens. This "science in society" aspect is crucial since the research in question must contribute to addressing a grand challenge faced by society.

Content of an MML Action Plan: The proposed MML Action Plan must be elaborated around questions associated with societal challenges or broader key EU policy initiatives which are the subject of intense public interest and debate around scientific and technological advances (see below). In 2011, proposals must be developed under one of three themes / Societal Challenges, and must cut across several scientific disciplines and consider new or emerging technologies as appropriate. For each of the three themes / Societal Challenges, we provide an example of the precise issue which could be addressed:

Theme 1	Health and Ageing (for example, obesity and related health disorders / diseases; Alzheimer's).
Theme 2	Climate Change and Resource Efficiency (for example: sustainable use and exploitation of marine resources)
Theme 3	Energy Security (for example: the transition to low-carbon energy systems and technology

Applicants must state which of the above themes (1, 2 or 3) their proposal addresses.

The MML Action Plan will aim to help the different partners[1] pool knowledge and experiences and intervene at different stages of the research process, where appropriate: designing research agendas, implementing research, using research results, assessing research activities and outputs.

The Action Plan must take account, where appropriate, of several of the following Science in Society issues:

- Public engagement in research (PER) (involvement of citizens and their organisations)
- Ethics in science (including in the social and economic sciences)
- Gender issues in research
- Young people's participation in science and attitudes towards science
- Two-way communication between scientists and other stakeholders.

[1] Partners are legal entities – cf. Article 2, § 1 - FP7 Rules of Participation (Regulation N°1906/2006 of 18 December 2006)

- Evidence-based policy-making / Policy-making based on or using science and research

Proposers are invited to consult relevant information on previous SiS initiatives on the *Science in Society* website[2].

Activities in an Action Plan: MML Action Plans are composed of activities at local and/or regional and/or national level as well as transnational networking and comparisons. These activities can intervene at different stages of the research processes (as mentioned under 'Content', above). Examples of activities include:

- Capacity-building through training, exchange of best practices, development/upgrade of knowledge management tools such as databases and ICT tools related to SiS know-how;
- Joint production of common communication materials making research findings available to civil society actors in forms which they can access and use;
- Sustainable forms of cooperation, consultation and dialogue between the different MML Action Plans actors which mobilise scientific knowledge, including cross-fertilisation with other forms of knowledge with a view to addressing societal concerns or policy-making;
- Establishment of specific services / mechanisms at the level of the partner organisations to promote Science in Society issues;
- Identifying and discussing topics and opportunities for future cooperative (multi-actor) research;
- Assessment of potential impacts of research activities on citizens and civil society; participatory technology assessment;
- Examination of barriers to the participation of civil society and its organisations in research and of possible means to overcome them.

What kind of research must the MML Action Plan try to influence? The MML Action Plan should shape research in new or emerging science and technology such as: nanotechnology; synthetic biology; nutrigenomics, or cognitive and brain science, for example. The research should be appropriate for tackling one of the Themes / Societal Challenges mentioned above. The MML Action Plan must be innovative in its approach and the proposal made under this topic must show how the Action Plan will change the usual ways of doing research.

Other conditions for the MML Action Plan: The proposed MML Action Plan must have a minimum duration of three years and must have a multidisciplinary approach and a transdisciplinary vision that addresses key Science in Society issues. The Action Plan / proposal must include transnational exchange of best practice and mutual learning between the actors.

Participants in the project and Action Plan: Each proposal's consortium should comprise research organisations[3] and at least two other types of actors from, for example:

- Cities and local / regional or national authorities
- Civil society organisations[4]

[2] http://ec.europa.eu/research/science-society/ - in particular Goverscience seminars and MASIS report
[3] A research organisation means a legal entity which carries out research or technological development as one of its main activities
[4] A CSO means a legal entity which is non governmental, non profit, not representing commercial interest and pursuing a common purpose in the public interest.

- Media organisations, etc.
- National or regional parliamentary advisory offices

The proposed consortium may comprise a more ambitious range of partners, for example, organisations which deal with scientific knowledge (science academies, museums and science centres, science festivals, businesses, etc) or which fund research.

Since the MML Action Plan must address SiS issues, the partnership must include relevant expertise in these fields.

Other essential components: The proposals must 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 on all participants. Particular attention must be paid to ensuring efficient management of the MML Action Plan, including appropriate experience and skills in the management team. The proposal must also include the means for in-depth independent evaluation of its activities. A targeted opening to international cooperation may be foreseen (beyond EU Member States and the Associated Countries), but the reasons for this and the added value to the proposal should be clearly justified.

Additional eligibility criterion: for each proposal, the consortium must consist of at least 10 independent legal entities established in at least 10 different Member States or Associated countries.

Funding Scheme: Coordination and Support Actions (supporting action). It is envisaged that four proposals will be financed. No more than two proposals will be financed from the same Theme / Societal Challenge.

Indicative budget for Commission contribution: EUR 16.0m

Expected impact: The MML Action Plans will contribute to promoting an open, effective and democratic European knowledge society, in particular by:
- An improved engagement of research organisations and other actors, including civil society actors, in Science in Society actions;
- The incorporation of science in society actions into the systems of research;
- An improved use of scientific knowledge by civil society and in policy-making;
- An improved transnational cooperation and synergies in different science in society domains.

Activity 5.1.1. Better understanding of the place of science and technology (S&T) in society

Area 5.1.1.1 Relationships between science, democracy and law

Topic: Involvement of civil society organisations in research

Civil society organisations (CSOs)[5] are playing a growing part in research activities to various degrees in Europe and contribute to the democratisation of research. The Framework Programme for Research encourages the involvement of civil society actors at different stages of the research process: designing research agenda, undertaking research, using and assessing research results[6]. Experimental cooperative research projects which bring together academics and civil society organisations are developing in various domains. The growing interest of CSOs n research occurs while research is more and more connected with technological development and innovation and solicited to provide expertise which serves policy-making.

This topic aims at better understanding the dynamics at play and investigating the characteristics of the civil society / "third sector" organisations 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.

Research will address the following three main issues:

(1) Knowledge and research potential: 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 researchers, etc

(2) Research processes involving academics and CSOs: respective roles of academics and CSOs that enter research partnership 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 for academics of such partnerships and what institutional incentives and measures exist for researchers to work with CSOs (including in terms of career development);perceptions of such partnerships by academics, research groups, research organizations and CSO experts in organisations at the EU (European umbrella), national and local level, etc.

(3) Interaction between these cooperative research processes and research policy: analysing aspects and impacts of various modes of joint participation of CSOs and academics in research policy-making, such as: participative processes, foresight, technology assessment, research prioritisation processes at regional, national and EU levels; agenda-building platforms, co-production of knowledge, policies of universities and research organisations which aim to promote such partnerships, identifying innovation and best practice.

Research must have a comparative approach across Europe. An international dimension might be added if justified.

[5] Non-governmental, non-profit, not representing commercial interests, pursuing a common purpose in the public interest. Sometimes considered as "third sector" in research

[6] Cf. [include reference to SSH FP6 on governance and SiS Goverscience publications]

Funding Scheme: Collaborative Projects (Small or Medium-scale focused research projects). It is envisaged that one proposal will be financed.

Indicative budget for Commission contribution: EUR 1.5m

Expected impact: Containing a wide-ranging overview of the current practices, challenges and opportunities, the research will provide a sound basis for the development of future policies and incentives (at national and European level) to further develop cooperation between researchers and civil society organisation experts on common research projects; as well as practical examples and references for researchers and CSOs that wish to create such research partnerships.

Topic: Grant to an identified beneficiary: Polish Presidency Conference

Named recipient: Polish Academy of Sciences

A conference under the auspices of the Polish Presidency of the European Union and the European Commission in the second half of 2011 will be organised by the Polish Academy of Sciences. The overall topic of the conference will be the governance and ethics of nanosciences and nanotechnologies. The conference will have a particular focus on the European Commission's Code of Conduct for the responsible development of nanosciences and nanotechnologies research, and will take stock of the activities of Member States with reference to the principles and actions foreseen under the Code of Conduct. The conference may also facilitate the dissemination of research outcomes from relevant EC funded projects in the area of governance and ethics of nanotechnologies.

Estimated budget for Commission contribution: up to EUR 125 000

Topic: Regulating Emerging Scientific and Technological Developments

Description of topic: Emerging sciences, such as nanosciences and nanotechnologies, Synthetic Biology, converging Nano-Bio-Info-Cogno sciences, and related emerging technologies in the fields of human enhancement, surveillance, dual-use, etc. will make the setting of hard and soft laws even more sensitive in the coming years. It is therefore necessary to investigate further the interplay between the co-evolution of science and law in democratic contexts through the following two related aspects:

1- Tensions resulting from Science and Technology (S&T) induced progress under given governance frameworks: In many instances, the integration of new science and technology developments into society has resulted in tensions and/or conflicts due to maladjustment of governance frameworks (e.g. safety regulations for new materials, bio-ethical regulations for procreation techniques, legal issues relating to privacy, etc.) to S&T advances. What can we learn about governance rules through the study of these tensions and conflicts? What are the impacts of the various types of rule (e.g. soft versus binding laws) on innovation and on the notion of progress led by emerging sciences and technologies?

2- Legal provisions for creating and adapting governance rules to emerging S&T: Drawing lessons from the above studies, researchers, legal scholars and other SiS stakeholders should reflect jointly on: the way governance rules have been evolving up to now in relation to S&T discoveries and innovations; on the role of civil society and industry in the evolution of regulatory processes in search of efficiency and resilience; on the co-evolution between technical / legal / moral norms (e.g. ethical governance of the so-called green innovation and development); on the features of the present "meta-rules" (i.e. legal dispositions ruling the establishment of law, e.g. stating an obligation to public consultation in certain cases) which permit and steer (or impair sometimes) this co-evolution; and on the evolution of these "meta-rules" themselves, bearing in mind the challenges that major breakthroughs in emerging S&T (e.g. nanotechnologies, synthetic biology, converging S&T) could bring to democratic societies.

While investigating these two aspects, the research should consider and elaborate on the specificity of the SiS governance model(s) developed in Europe (as opposed to US and other models in the world).

Funding Scheme: Collaborative Projects (Small or Medium-scale focused research projects). It is envisaged that one proposal will be financed.

Indicative budget for Commission contribution: EUR 1.5m

Expected impact: Research outcomes will contribute to a better insight on the interactions between science and law in democratic contexts. They will help European policy makers to better approach regulatory issues in the context of polycentric and multilevel governance in view of the next wave of innovations triggered by emerging sciences and technologies. They will eventually permit the European Commission to address more systematically these complex issues in future work programmes.

Topic: Integrated Assessment Methods for measuring societal impacts of emerging scientific and technological developments

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.

Funding Scheme: Collaborative Projects (Small or Medium-scale focused research projects). It is envisaged that one proposal will be financed.

Indicative budget for Commission contribution: EUR 1.5m

Expected impact: Research outcomes will contribute to a better understanding of the respective roles of the various Knowledge Assessment methods (understood here as methods conducive to an assessment of specific scientific, technological or innovation advances). These outcomes will contribute to shaping an integrated framework conducive to a better and more balanced assessment of emerging sciences, technologies and related societal innovations.

Topic: A Forward Look at new ways of doing and organising research in our knowledge societies

In its Conclusions of 8 December 2009[7] , 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 "EU2020" 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 policy-making. 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.

Funding scheme: Coordination and support action (supporting action). It is envisaged that one project will be financed.

Indicative budget for Commission contribution: EUR 1.0m.

[7] Ref. 17189/09

Expected impact: The results of the project will highlight and formalise new and innovative approaches in the ways that research is performed, supported by the identification and dissemination of best practices in this field.

Activity 5.1.2 Broader engagement to anticipate and clarify political, societal and ethical issues

Area 5.1.2.2 Conditions for an informed debate on ethics and science

Topic: Expert group on Dealing with ethical and regulatory challenges of international biobank research.

The EU is an important actor in research biobanking, which uses collections of biological samples and the (genetic) information that can be extracted from these. A challenge that has been identified by scientists, ELSA scholars and Competent Authorities is that the implementation of relevant ethical guidelines and of the EU Data Protection Directive (Directive 95/46/EC) that govern biobank research differs sometimes greatly from country to country, which impedes international collaboration and exchange of information. An Expert Group is to be established to identify options for targeted policy actions that can be taken in relation to facilitate the ease of international biobank research.

Funding Scheme: Coordination and Support Action (Expert contracts)

Indicative budget for Commission contribution: EUR 50 000

Expected impact: The Expert Group will provide advice on the options for actions, including regulatory ones, which could be taken to address identified challenges in implementing data protection and other ethical guidelines related to international biobank research

Area 5.1.2.2 Conditions for an informed debate on ethics and science

Topic: Action to investigate ethics capacity-building methodology

Description of topic: The ethical framework of the 7th Framework Programme is directly linked to the implementation of the charter of fundamental rights, development cooperation of the EU as well as to the implementation of the internal market (Directive 2001/20). In this context, ethics capacity building is an important component in the successful implementation of the above framework. The proposed actions under this topic will identify training needs in ethics capacity building at the EC level and will propose specialised training methodologies addressing the needs of the various target groups. These groups include the members of national and local ethics committees, civil society organizations and the FP7 National Contact Points. In addition, specific actions will target the scientific community in order to improve the understanding of the FP7 ethical framework.

Funding Scheme: Public Procurement

Indicative Budget for Community Contribution: EUR 300 000

Expected impact: This will lead to the design of specific training actions which respond to the needs of the appropriate target group.

Activity 5.1.3 Strengthening and improving the European science system

Area 5.1.3.3 Encouraging the debate on information dissemination, including access to scientific results and the future of scientific publications, taking also into account measures to improve access by the public.

Topic: 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*[8], 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*"[9]. 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*"[10].

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. For example, they 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 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.

Funding scheme: CSA co-ordination - It is envisaged that a maximum of two proposals will be funded

Indicative budget for calls for proposals: 2 M€

Additional eligibility criterion: Maximum requested EC contribution: 1 M€

Expected impact: to sustain/improve the co-ordination of existing Member State and Associated Country initiatives on access to and dissemination of scientific information; to extend current activities to other countries (both EU/Associated Countries and internationally) and/or thematic areas; to put in place new/innovative co-ordination initiatives; to create new initiatives (e.g. regional, linguistic or thematic) improving the co-ordination of existing strategies on digital repositories.

[8] COM(56)2007
[9] Council Conclusions, 2832nd Competitiveness, November 2007
[10] Questionnaire to CREST – Summary of responses, 9 June 2009

Area 5.1.3.4 The reciprocal influence of science and culture

Topic: Clusters of Cities of scientific culture for innovation

Objective: The purpose of this topic is to seek pilot 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. The role of cities in promoting scientific culture for innovation is a particular focus of the topic.

Background: European policy makers have recognised the importance of culture as a catalyst for creativity and innovation[11], and the European Ambassadors for Creativity and Innovation[12] 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 must 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 know-how, mutual peer-learning activities, and associated supporting activities such as international 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 Action 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 must 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).

[11] Insert original reference

[12] European Ambassadors for Creativity and Innovation Manifesto: http://ec.europa.eu/education/lifelong-learning-policy/doc/year09/manifesto_en.pdf

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 pilot action proposed must 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 proposal under this topic must include representatives of city or urban authorities from at least five different EU Member States or Associated Countries. Each city represented must have a minimum of 100 000 inhabitants.

The full partnership in the network must, however, demonstrate how it is or will able to mobilise the different stakeholders as appropriate in each of the activities covered under the Plan.

Funding Scheme: Coordination and Support Actions (supporting). The Commission contribution will not exceed 75% of total eligible costs.

Additional Eligibility Criteria: the proposed projects must have duration of at least three years. The proposed consortium must include representatives of city or urban authorities (of a population of at least 100 000) from at least five different European Union Member States or Associated States.

Indicative budget for EC contribution: EUR 3.0m. It is envisaged that a maximum of two proposals will be funded.

Expected impact: Linking science and technology to cultural and creative activities actions should encourage more young people to look at science and technology subjects under a new light and not just in terms of leading to qualifications needed for academic/research careers. Regions and cities across Europe will benefit through the exchange of practice and experience in mobilising local actors in science and technology and creative /cultural/ business/ commercial sectors and help them work together and adopt policies to stimulate new cultural and entrepreneurial activities.

Action Line 2: Strengthening potential, broadening horizons

Activity 5.2.1. Gender and research

Area 5.2.1.1 Strengthening the role of women in scientific research and in scientific decision-making bodies

Topic: 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 had good impact on decision-makers, longer-lasting change is needed. The overall objectives have always been to attract more women into science, engineering, technology, and mathematics 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 funded a survey of current best practices and produced guidelines to implementing such change[13]. 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 must 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 must 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.

[13] Practising Gender Equality in Science (PRAGES): database available on http://www.pragesdatabase.eu/ and guidelines available on http://www.reteparioppportunita.it/defaultdesktop.aspx?page=2749

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.

Periodic and final assessment on the efficiency of the action plans must be part of the proposal, provided by an external independent evaluator. Final procedural guidelines for other institutions interested in similar structural approaches must be prepared and disseminated. Dissemination activities at regional, national and/or international level must 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 must 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.

Funding Scheme: Coordination and Support Action (Supporting).

Additional eligibility criteria: for the purposes of this topic, the minimum participating condition for the Coordination and Support Action is three independent legal entities from three different Member States or Associated Countries. The duration of the project must be between 3 and 5 years.

Indicative budget for EC Contribution: EUR 6 million. The EC contribution will not exceed 75% of total eligible costs. It is envisaged that a maximum of two proposals will be funded.

Expected Impact: The implementation of the Action Plans should yield tangible, measurable results in terms of female participation in research at all levels of seniority among project participants. The action should have significant wider benefits across Europe beyond those accruing directly to project participants. Greater awareness of the issue and dissemination of guidelines should encourage other entities, external to the consortium, to take up similar activities. Finally, it is expected that the activities carried out within the project should contain plans and mechanisms to continue in the longer run without EC support in the form of long term policy.

Topic: survey on the existence of collective labour agreements in the field of public research.

This topic concerns the performance of a survey on the existence of collective labour agreements between employers and trade unions in the field of public and private research.

Agreements that cover career paths, work-life balance, equal opportunity, etc, could be of particular benefit to women researchers, but would also improve the working environment in research institutions, which is also one of the aims of the related structural change topic.

The survey will identify if and where these collective labour agreements exist, which is their content, and which are the main stakeholders involved in their drafting and adoption at national level. A comparative analysis and final assessment of the results obtained by these collective agreements will be provided

Funding Scheme: Public Procurement [type of procedure to be confirmed]

Estimated budget for Commission contribution: up to EUR 200 000

Activity 5.2.2 Young people and science

Area 5.2.2.1 Supporting formal and informal science education in schools as well as through science centres and museums and other relevant means

Topic: 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'*[14].

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

[14] Report of the high-level group on science education chaired by Michel Rocard, 2007. http://ec.europa.eu/research/science-society/document_library/pdf_06/report-rocard-on-science-education_en.pdf

intended to complement school science curricula and should particularly focus on teacher training activities and the promotion of European teachers' networks. The actions proposed must 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 must 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.

Projects are expected to have the broadest coverage of EU Member States and Associated Countries - in order to generate a European impact (see under 'Funding Scheme' below, as well as the Call fiche). In addition to this during contract negotiation links will be established between funded projects and an Internet based information platform on science education to ensure the widest possible dissemination of best practice, methods and tools. Such two-way transfer of know-how will be made on an open access non-commercial basis. Projects selected for funding must agree to these conditions, as described in the footnote below[15]. This information platform will be operational in early 2010.

The actions must include an evaluation conducted by a person or persons or organisation which is independent of the consortium. It is envisaged that a maximum of three proposals will be funded.

The proposals must clearly identify not only the participants but any third parties to which funds will be disbursed under the grant agreement.

Funding Scheme: Coordination and support actions (supporting action). It is envisaged that three proposals will be financed.

Indicative budget for Commission contribution: EUR 6.5m

Additional eligibility criteria: for the purposes of this topic, the minimum participation condition for the Co-ordination and support action (supporting) is at least 10 independent legal entities, established in at least 10 different Member States or Associated Countries. Each

[15] The following special clause will 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 ensure that any necessary authorisations have been obtained and that it has not accepted legal obligations which could conflict with this clause.

proposal must have a minimum requested EC contribution of EUR 2 000 000 and a minimum duration of 3 years.

Expected Impact: To bring about a change in the way that science is taught in schools through European collaborative activities focusing on teacher training on the use of techniques that have been successfully piloted, adapting and applying them on a European scale. The action should have significant wider benefits across Europe beyond those accruing directly to project participants. The long-term impact looked for is a significant increase in the numbers of young people in Europe taking up scientific careers and a generally increased knowledge in science in the younger generations.

Topic: Lindau Foundation event to bring together young researchers with distinguished scientists as role models.

Legal Entity: Stiftung Lindauer Nobelpreisträgertreffen am Bodensee (Foundation Lindau Nobelprizewinners Meetings at Lake Constance) Lennart-Bernadotte-Haus, Alfred-Nobel-Platz 1, 88131 Lindau, Germany

Indicative budget for Commission contribution: EUR 55 000

The Foundation Lindau supports the annual meeting with around 20 Nobel Prize winners in Lindau, Germany. Students and young researchers come from all over the world to listen to the Laureates' lectures and participate in discussions. With the aim of promoting contact and dialogue between distinguished scientists (as "role models") and aspiring young scientists, the grant will be used to help finance the expenses of young students and researchers to attend the meeting (which will take place in mid-2011) and the expenses of a separate networking event at the meeting. The Commission grant will also fund an interdisciplinary workshop.

Objectives expected to be fulfilled: The aim is to promote networking, contact and dialogue between distinguished scientists (Nobel prize-winners) and aspiring young researchers and scientists. The grant will be used to finance the participation of EU PhD students working outside the EU and students and young researchers studying or working in the EU Member States and Associated Countries.

Funding Scheme: Co-ordination and support action (supporting) – grant to an identified beneficiary[16].

Maximum rate of co-financing: the Commission shall finance 100% of the total budget of the costs of participation of the selected students / young researchers in the meeting, and no more than 90% of the costs of the workshop and of the networking event, up to EUR 55 000.

[16] *In accordance with Articles 14(a) and 27 of Regulation (EC) No 1906/2006 of 18 December 2006 laying down the rules for the participation of undertakings, research centres and universities in actions under the Seventh Framework Programme and for the dissemination of research results (2007-2013)".*

Action Line 3: Science and Society Communicate

Area 5.3.0.5 Promoting excellent trans-national research and science communication by the means of popular prizes

Topic: European Union Contest for Young Scientists (EUCYS) 2011

Legal Entity: The Finnish Association of Graduate Engineers, Ratavartijankatu - 2, FIN-00520 HELSINKI, Finland

Description of Topic: The European Union Contest for Young Scientists brings together first prize winners of national contests for pre-university school science projects to compete for prizes and awards. The EU Contest takes place each year in a different location. The 2011 edition will be implemented through a grant to the Finnish Association of Graduate Engineers in Helsinki. The EU Contest provides additional stimulus to young people who have already demonstrated that they are applying science to solve problems. Many go on to become successful scientists. It attracts a considerable level of co-funding in the host country, and high levels of international media attention. International research organisations and similar bodies donate many of the non-monetary prizes.

Commission budget to be allocated: EUR 600 000

Funding Scheme: Co-ordination and support action (supporting) – grant to an identified beneficiary.

Maximum rate of co-financing: the Commission shall finance up to 75% of the total eligible costs for this action, up to EUR 600 000.

Area 5.3.0.6 Research aimed at enhancing inter-communication concerning science, both in its methods and its products, to raise mutual understanding between the scientific world, and the wider audience of policy-makers, the media and the general public

Topic: 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 that is not possible with traditional media such as television, radio and the press. In particular internet resources and tools such as "wikis", YouTube©, FaceBook© and 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 an information tool and for developing a participatory communication between scientists and the different publics.

The research described in the proposal must ensure a broad European coverage and have an international perspective highlighting especially where lessons can be learned and where successful and innovative initiatives exist and the extent to which such communication activities are integrated into the working environment of scientists and technologists. Furthermore, the research should endeavour to identify the impact of such communication technologies on public perception and understanding of science through case studies on science and technology issues of topical interest.

The research proposed must contain an evaluation of current initiatives and demonstrate how it is expected to go beyond and improve the current state of understanding of the field.

The research must also address how the "digital divide": how populations with limited access to the internet may as a result have reduced access to scientific information and culture. What effect will the growth in digital technologies have on availability of information to the general public through more 'traditional' media?

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

Funding Scheme: Collaborative Projects (Small or Medium-scale focused research projects).

Indicative budget for Commission contribution: EUR 1.0 M.
It is envisaged that one proposal will be funded.

Expected impact: Research outcomes will contribute to a better insight on the role played by emerging web tools (especially tools like "wikis", YouTube, FaceBook, Web 2.0, etc) in better science and society interaction, and in particular on the dissemination of knowledge and on new models of public engagement in science issues debates and decision-making, as well as the collaborative effect of these technologies.

5.4 Strategic Activities

Topic: Studies to assist the European Research Area Board

The Work Programme will support the work of the European Research Area Board (ERAB), established by Commission Decision on 7 December 2007[17], in the performance of its tasks to advise the Commission on the design and implementation of Community policy in research and technological development, and in particular on the realisation of the European Research Area.

Following public procurement procedures, up to two contracts will be established (one for each study).

[17] Commission Decision C/2007/6165

Funding Scheme: Co-ordination and support action (Public Procurement[18] -Negotiated Procedure, 1st and 2nd semester 2011)

Indicative budget for Commission contribution: EUR 100 000

Expected Impact: The studies will be used as a key input to ERAB's deliberations on the topics in question, in preparation for ERAB's eventual advice to the Commission on these issues.

Topic: Supporting specific tasks of the network of Science in Society National Contact Points

National Contact Points (NCPs) for Science in Society have been organised by the EUROSIS project (under the 2007 Science in Society work programme) into a network in order to promote good practice and to support the implementation of the programme.

The EUROSIS project, aimed at developing the transnational exchange of information and best practice between the Science in Society NCPs, was active between 2008 and 2010, when similar networking activities continued for one year under a one-off project

This topic will build upon these functions to mobilise the network of NCPs to support in particular the priorities of the work programmes in 2011 and 2012 (for example, on issues such as the Mobilisation and Mutual Learning Actions (MMLA). A network of national contact points will undertake the organisation of a limited number of focused seminars, conferences and tools that could efficiently support NCPs in their task to ensure that stakeholders understand and develop better the new approaches being taken in the SiS work programmes. The MMLA encourages the participation of a wider range of actors in SiS activities, in particular civil society organisations. This implies an adaptation of NCPs services to facilitate the access of these types of actors to the SiS work programme.

Only officially nominated NCP organisations can apply and be part of the project consortium. The consortium does not need to involve all NCPs in its partnership but needs to provide sufficient assurances that it will involve potentially all NCPs in its activities in order to reach the desired outcomes. Only one project will be funded.

Funding Scheme: Coordination and support actions (supporting action).

Indicative budget for Commission contribution: EUR 300 000

Expected impact: A continually improved NCP service across Europe, therefore helping simplify and improve access to science in society calls, lowering the entry barriers for newcomers, and raising the average quality of submitted proposals. A more consistent level of NCP support services across Europe.

[18] In accordance with Art 14(b) of Regulation (EC) No 1906/2006 of 18 December 2006 laying down the rules for the participation of undertakings, research centres and universities in actions under the Seventh Framework Programme and for the dissemination of research results (2007-2013)