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Science, economy and society Highlights

Socio-economic
Sciences and Humanities
Science in Society
2009

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Fax: (32-2) 29-58220
E-mail: research-eu@ec.europa.eu
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Directorate-General for Research
Directorate L – Science, Economy and Society

European Commission
Office SDME 07/60
B-1049 Brussels

Fax: (32-2) 29-66020
E-mail: rtd-publications@ec.europa.eu

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FOREWORD BY THE DIRECTOR

The year 2009 has been one of major changes. The EU has reacted in a collective manner to the financial crisis and economic recession, and committed itself wholeheartedly to the transition to a low-carbon economy. 2009 has also confirmed a shift towards a multi-polar world order, underpinned by the continuing rise of power and assertiveness of the BRIC countries (Brazil, Russia, India, and China). In the face of these challenges, Europe needs to commit itself, even more to research and innovation, which will allow us to react more efficiently to rapid socio-economic changes.



In this regard, Science in Society (SIS) and the Socio-economic Sciences and Humanities (SSH) are particularly important, as they help us better understand the underlying causes of the challenges which Europe faces and help us better prepare for the future. These sciences also interact with other disciplines to provide expertise to policymakers in key areas, such as environment and health, thus contributing to better interaction and integration of scientific knowledge across all sectors of society. In this context, dissemination and exploitation of project results has become one of the key priorities of the programmes.

EU-level activities witnessed a major strategic turn in 2009. The idea that we should concentrate our efforts on a limited number of big, societal challenges fits very well with the reflections on EU research policy as a whole.

It is now widely recognised that in addition to the system of individual grants managed by the European Research Council (ERC) under the 'Ideas' programme, Europe needs a policy-relevant and problem-oriented research agenda. Thus, in 2010, the EU SSH Work Programme will focus on 5 key societal challenges and 11 specific topics.

Concern for the societal dimension of research policy does not end here, however. We have pushed forward the policy agenda by better documenting the discussions on open access to scientific results and on the implementation of the code of conduct for responsible nanotechnologies, and by developing and managing ethical reviews in the Framework Programme evaluation system. Better integration of science in society needs concrete measures, and EU activities support and amplify national efforts.

I hope the *Highlights of the Year* publication provides you with a robust view of the many and varied actions undertaken by the Science, Economy and Society Directorate in 2009, and a glimpse of what is expected to take place in the future.



Jean-Michel Baer

Director for Science, Economy and Society

THE YEAR IN BRIEF

The key mission of the Science, Economy and Society Directorate (Directorate L) is to develop and implement measures to support the societal dimension of European research. Two programmes in the Seventh Framework Programme (FP7) – the Socio-Economic Sciences and Humanities (SSH) and Science in Society (SIS) Programmes – comprise the bulk of Directorate L's activities. Furthermore, the Directorate is represented by other significant areas of work, such as forward-looking activities, communications for the Directorate-General for Research (DG RTD) as a whole, and secretariat support for the European Research Area Board (ERAB). The outline below is an opportunity to highlight some of the Directorate's key achievements in 2009.

Foundations set for new approach

Firstly, one of the major accomplishments of 2009 was the successful outcome of efforts designed to ensure that the EU's work in the SSH and SIS fields increases its policy focus and responsiveness to the major policy challenges of the coming years.

From 2010, the annual SSH Work Programme will be integrated with an overall strategic roadmap covering the period from 2010 to 2013. The research agenda is being carefully streamlined to avoid the fragmentation of current and past efforts, to allow for better accumulation of critical mass/EU added value, to accommodate more coherent and complementary research activities (including forward-looking activities), and to generate greater visibility of EU research results.

The launch of a new approach to public engagement in the SIS field (large, multifunctional projects addressing key challenges), as described in the SIS 2009 Work Programme, will be followed in 2010 by Mobilisation and Mutual Learning Action Plans. The aim is to address key SIS objectives for each action plan by bringing together a European consortium of different actors to cooperate on the basis of a common set of specific SIS actions over a four-year period. To achieve this new outlook, Directorate L will continue to work closely with many stakeholders, such as the research community (including the European Advisory Group), the research administrations of the EU Member States, other research Directorates and policy Directorates-General of the European Commission, and civil society organisations (CSOs). Specific information events were organised in 2009 with National Contact Points (NCPs), experts and researchers on the new approach for the SSH and SIS Programmes. The Programme Committees also held discussion sessions during the year.

Progress towards a European Research Area

Secondly, Directorate L is committed to the development of a true European Research Area (ERA), a concept first coined in 2000 as a means of unifying research across Europe. Some of the Directorate's achievements in support of the ERA follow.

ERAB was established in March 2008 to provide independent advice to the Commission on the realisation of the ERA. ERAB comprises 22 eminent members from different fields of research, academia and business (chaired by Professor John Wood of Imperial College, London), and its secretariat is part of Directorate L. In September 2009, ERAB launched its first major policy document, *Preparing Europe for a New Renaissance: A Strategic View on the Contribution of the European Research Area*.

On 2 June 2009, the Directorate hosted a seminar on forward-looking activities and their usefulness for the implementation of ERA-related initiatives. Six projects in this field were selected after the first FP7 call in the SSH Programme. The discussion that ensued between experts from these and other projects, representatives of public authorities, and directors from DG RTD, aimed to identify the needs for horizon-scanning, resulting from the new research policy initiatives. In November 2009, the usefulness of forward-looking activities for the implementation of ERA-related initiatives was discussed at the CREST (the Council's Scientific and Technical Research Committee) meeting. Foresight was also the subject of a session at the DG RTD ERA 'Working Together to Strengthen Research in Europe' conference, from 21 to 23 October 2009.

Following on from the Council conclusions of November 2007, the launch of a pilot project on Open Access will eventually give unrestricted online access to EU-funded research results, primarily research articles published in peer-reviewed journals (after an embargo period of between 6 and 12 months). In 2009, the Directorate invited EU Member States (via CREST) to respond to a questionnaire and the results of this exercise were presented to CREST. Furthermore, the Directorate hosted a session on Open Access during the aforementioned DG RTD ERA conference.

Two specific actions under the SSH and SIS Programmes known as METRIS (Monitoring European Trends in Social Sciences and Humanities) and MASIS (Monitoring Policy and Research Activities on Science in Society) aim at better

mapping of research and policy trends in European countries. The year 2009 marked the end of their first phase with the publication of two important expert reports. The next steps concern the establishment of a network of correspondents in most (if not all) Member States and associated countries.

Addressing policy needs

Finally, the Directorate mobilised SSH expertise to address and/or anticipate important EU policy challenges, as follows.

The Foresight Expert Group on the EU in 2025 finalised its work in 2009, with all the contributions of its members published in June 2009. In addition, the Directorate produced an analytical paper that served as a background document for a discussion between research ministers at the fringe of the September Competitiveness Council. Preparations are underway to launch a new expert group on 'Global Europe 2030/2050: EU policies and research priorities'.

Together with BEPA (Bureau of European Policy Advisors to European Commission President Barroso) and representatives from the FP7 PEGGED (Politics, Economics and Global Governance: the European Dimensions) project, the Directorate organised a policy conference on 17 February 2009 titled 'Global Economic Governance: Systemic Challenges, Institutional Responses, and the Role of the New Actors'. The Directorate also participates in the BEPA ad hoc group on social innovation (support to the KATARSIS (Tackling Social Exclusion through Social Innovation: Strategy Research Options) project).

In collaboration with the Directorate-General for External Relations, Directorate L also organised a workshop on 27 April 2009 titled 'The EU and the US in a Changing Multipolar System: Trans-Atlantic Convergences and Divergences'. The workshop included researchers involved in SSH-funded projects (e.g. CHALLENGE, GARNET, and EU-GRASP), representatives from distinguished foreign policy institutions and think tanks (e.g. Institute of Security Studies, and the European Council of Foreign Relations), and practitioners (e.g. NATO, the German Marshall Fund, and a former member of the Clinton Administration). Participants debated on the window of opportunity opened up by the Obama Administration (and the implications for Europe) to reassess EU-US relations in tackling issues ranging from climate change, financial crisis, security, and human rights protection to attitudes towards multilateralism.



***SOCIO-ECONOMIC
SCIENCES AND
HUMANITIES
PROGRAMME:
HIGHLIGHTS***

SSH WORK PROGRAMME 2009 AND SELECTED PROPOSALS

In 2009, the Socio-economic Sciences and Humanities (SSH) Work Programme announced 3 calls for proposals featuring 26 research topics. As a result of these calls, an EU funding total of over EUR 67 million was allocated to 31 projects.

Background on the 2009 SSH call

Published: 3 September 2008

Deadline: 13 January 2009

EU funding total: EUR 67.22 million

The call FP7-SSH-2009 was divided into three sub-categories, as follows.

1. Call FP7-SSH-2009-A: 20 topics in 7 activities were open for submission to Collaborative Projects and 1 was also open to the funding scheme Research for the Benefit of Specific Groups – Civil Society Organisations.
2. Call FP7-SSH-2009-B: 2 topics in 2 activities were open for submission to Collaborative Projects for specific Cooperation Actions dedicated to international cooperation (small or medium-scale focused research projects).
3. Call FP7-SSH-2009-C: 4 topics in 4 activities were open to Coordination Actions and Support Actions.

The research areas covered by the SSH Work Programme in 2009 included issues such as these highlighted below.

- Service economy on growth and welfare (e.g. education, information and communication technologies or ICT, intangible investments, and health and tourism).
- Internationalisation of firms and research systems (i.e. the knowledge economy).
- Public policy drivers for growth and sustainability in Europe (e.g. the efficiency of the public sector and macroeconomic policies, and evaluation (*ex ante* and *ex post*) of EU policies).
- Structural effects of paradigm shifts in land use functions and the energy-transport-environmental nexus (i.e. the post-carbon society).
- Determinants of cohesion and sustainability of urban areas in Europe and in emerging/developing countries.
- Impact of climate change on social tensions and conflicts (such as water and land use, and so forth).
- Sustainable development and regional/urban cohesion including adaptation to global changes and to the rural/urban development issue for which energy, land use and agriculture are essential.
- Social, cultural and political factors of widening social inequalities.
- Economic, social and institutional aspects of large-scale migration.
- Cultural exchanges within Europe and with other parts of the world and a greater diversification of values and beliefs (e.g. interethnic tolerance, transmission of religious beliefs, and gender and intercultural interactions).
- Differences of modes of governance in Europe and in the world.

- Changing nature and perceptions of borders.
- Multicultural nature of European societies.
- European citizenship and electoral participation; populist trends, the role of the media, different experiences in active citizenship, and social mobilisation.
- Historical developments in Europe.
- New indicators, databases and models.
- Forward-looking activities for the world and Europe in 2030.
- Foresight activities about 'Social Europe'; scenarios for how health, lifestyle, consumption, work and families will be related in future.

It total, 467 proposals were submitted to the 3 sub-categories, and were assessed by 170 experts during February and March 2009. The experts selected 31 projects to receive funding, which represent a total of 328 participants predominantly from research organisations and the secondary or higher education sector.

Most of the participants (295) are from 25 EU Member States, although 20 originate from 5 associated countries (Croatia, Israel, Norway, Switzerland and Turkey) and 13 from either International Cooperation Partner Countries or third countries, including China, Morocco, Russia, Senegal, South Africa and Ukraine.

Some examples of projects from this funding round are presented below.

Education in a knowledge society

Project title: Making Capabilities Work (WorkAble)

EU funding total: EUR 2.2 million

Education is a pillar of the Lisbon Strategy and a key policy in the European drive for innovation. The WorkAble project will conduct a survey in 10 European countries on whether (and how) the match between young people's supply of skills and competencies and changing labour-market needs is sustained in European knowledge societies. It will explore how educational strategies are implemented and assess whether they enable young people to convert knowledge, skills and competencies into capabilities to function as active citizens. The project mobilises 12 teams from various disciplines (such as

educational science, sociology, economics, philosophy, political sciences, and social work sciences), providing a broader and richer perspective on an educational issue.

Factors behind the advent of new families

Project title: Social Platform on Research for Families and Family Policies (FAMILYPLATFORM)

EU funding total: EUR 1.4 million

FAMILYPLATFORM will address fundamental research issues and key policy questions in the context of a growing variety of living arrangements and of new types of families. These may relate, for instance, to the reconciliation of work and family life, gender equality, parenthood and filiation, intergenerational collaboration, health and education, as well as cultural patterns and preferences. The project will deliver a focused, critical review of existing research, and will bring together at least 40 different stakeholder representatives, including family associations and policy-making.

Public economic policy for growth

Project title: Growth and Sustainability Policies for Europe (GRASP)

EU funding total: EUR 2.3 million

In order to address the issue of growth in Europe, it is important to look at the quality and effectiveness of public intervention. A broader analytical view of the conditions for growth is necessary; it should address taxation and government expenditure as well as public institutions and various regulations, all of which play a crucial role in shaping economic dynamism. The GRASP project will investigate five important layers for growth: (1) research and development; (2) structural economic reform; (3) legal, institutional and organisational reforms; (4) global commitments; and (5) fiscal policy. It will also aim to identify the policy options that would best support the achievement of the Lisbon Strategy goals, including those related to the sustainability of public finances and their contribution to growth in the medium to long term.

Challenges for Europe in the world of 2030 (AUGUR)

Project title: Challenges for Europe in the world of 2030 (AUGUR)

EU funding total: EUR 2.5 million

Europe needs to anticipate the potential evolutions that will shape the world in the next 15 to 20 years. In particular, there is a need to evaluate and measure recent changes in the world economy, identify underlying trends, evaluate the consequences for the EU, and put policies in place in response to these developments. The AUGUR project brings together seven key partners specialised in foresight work.

The social inequality phenomenon

Project title: Growing Inequalities Impacts (GINI)

EU funding total: EUR 2.7 million

Despite economic growth over the last decade or so, social inequalities have increased in many developed countries. In the framework of the European Commission's Renewed Social Agenda and in view of the current global crisis, it is of utmost importance to understand the key social, cultural and political aspects of this phenomenon and its impacts on society, as well as to identify policy options for various actors. The emergence of new forms of inequalities (beyond income and wealth) is also of primary interest. The GINI project tackles this challenge by comparing the inequalities inherent in 25 EU countries, as well as in Australia, Canada, Japan, and the US.

Climate change: social hazard or catalyst for peace?

Project title: Climate Change, Hydro-conflicts and Human Security (CLICO)

EU funding total: EUR 3 million

The CLICO project represents the outcome of the first coordinated call between the SSH and Environment Work Programmes. Its aim is to fill a gap in knowledge on the social dimensions of climate change by considering whether hydro-climatic hazards intensify social tensions and conflicts or provide a catalyst for cooperation and peace in the Mediterranean, Middle East and Sahel. It is the first time that partners from Israel and Gaza/West Bank are present in the same project, and the first time leading researchers in water resources, vulnerability, and peace and security studies have been brought together under such a study.

Assessing media accountability

Project title: Media Accountability and Transparency in Europe (MediaAct)

EU funding total: EUR 1.4 million

MediaAct is a comparative research project on media accountability systems in 11 European states and 2 Arabic countries as indicators for media pluralism in Europe. The project will analyse the development and impact of established media accountability systems (e.g. press councils and ethics codes) as well as new accountability systems emerging on the Internet (e.g. media criticism in blogs and online ombudsmen). The partners will investigate the quantity and quality of media accountability systems as prerequisites for pluralistic debates about media independence in times of growing media concentration. They will also develop policy recommendations for EU media lawmakers, as well as incentives for media professionals and media users alike to actively engage in holding the media accountable.

To apply for a grant under the Socio-economic Sciences and Humanities Programme or to access previous calls for proposals, use the 'Find a call' tab as part of the CORDIS website at <http://cordis.europa.eu/fp7/ssh>

SSH RESEARCH: A NEW APPROACH

In a world that is constantly being put to the test by global challenges, the socio-economic sciences and humanities (SSH) have a unique role to play in shaping solutions for today and the future. The SSH Programme recognises that in order to boost its impact on society, research and the infrastructure that supports research practice must move in step with change. In 2010 and beyond, a challenge-driven approach will characterise the funding and initiatives developed and implemented by the Programme. This will include a greater emphasis on pooling resources and brokering new partnerships, as well as on more targeted, complimentary research activities.

The SSH Programme makes a significant contribution to promoting shared understanding across Europe and to the resolution of wider international problems. It helps improve the way policy is formulated, implemented and assessed at European, national, regional and local levels, and contributes to realising the vision and goals set out by the European Community.

Leading by example

The Science, Economy and Society Directorate (Directorate L), to which the SSH Programme belongs, currently manages over 210 SSH research projects. These involve several thousand researchers from more than 1 500 organisations such as universities and research institutes, in over 70 countries. This scale makes it the largest programme in the world that specifically targets SSH.

As a leader in the field, the SSH Programme must continue to remain in sync with the realities being faced both within the field and by society at large in order to exploit the full potential of its research cooperation activities. From 2010, calls for proposals under the SSH Programme will represent a new, challenge-driven approach that will include an emphasis on:

- developing coherent and complementary research activities;
- pooling resources;
- achieving critical mass;
- enhancing interdisciplinary research efforts;
- linking disciplines and approaches;
- forging partnerships beyond the scientific community.

Within the new approach, it will also be essential to create a solid and widely accessible knowledge base in SSH that will pave the way to the common development of SSH research infrastructures.

Informed change: groundwork established through consultation

As a first step towards understanding the direction the SSH Programme would take, Directorate L, in consultation with the scientific community, EU Member States and other Commission services, identified a number of important current 'Societal Challenges' for the European Union. They include:

- changing the role of the financial system to better serve economic, social and environmental objectives;
- creating and adapting jobs in Europe in the context of a socio-ecological transition;
- Europe facing a rising multi-polar world.

What does it mean for SSH applicants?

The Societal Challenges will be part of the 2010-2013 SSH Work Programmes and will be complemented by a number of more targeted conventional research topics. Each challenge will be addressed by a specific set of research and non-research actions that will be combined into a single, large-scale integrating project.

Future project proposals to the SSH Programme should pay attention to the following:

- a coordinated interdisciplinary approach and plurality of perspectives to examine the different dimensions of the societal challenge under consideration;
- building on previous research, and stock-taking;
- forward-looking/foresight analysis regarding the evolution of the societal challenge, where relevant;
- deployment of a significant international cooperation dimension in addition to the European dimension;
- dissemination and exploitation of research results in a variety of contexts (e.g. scientific, policy, media and civil society);
- development of an effective critical mass of actors, involving a wide range of key stakeholders;

- a rigorous professional approach to managing research and day-to-day administrative work;
- ethical and gender dimensions will continue to be relevant in both the conduct of the research and its content.

The new approach will be implemented as a pilot exercise in 2010. The first call for proposals was published on 30 July 2009, with a submission deadline of 2 February 2010. In subsequent calls, the number of Societal Challenges per call will increase in proportion with the rise in the general EU funding total for the SSH Programme. To apply for a grant, use the 'Find a call' tab at http://cordis.europa.eu/fp7/ssh/home_en.html

From 2010, the SSH Work Programme will address a core set of societal challenges. The approach places emphasis on finding solutions to these challenges, and future research proposals are asked to factor in a number of essential components. The Indicative Strategic Research Roadmap contains a more detailed rationale of the outlook for coming years. This and more information on the new approach is available at http://ec.europa.eu/research/social-sciences/societal-challenges_en.html

National Contact Points (NCPs) are also available in all EU Member States and associated countries to help guide you through the application process. A list of NCPs is available at http://cordis.europa.eu/fp7/ssh/ncp_en.html



MONITORING EUROPEAN TRENDS IN SOCIAL SCIENCES AND HUMANITIES (METRIS)

The aim of METRIS is to support the European Research Area (ERA) in the socio-economic sciences and humanities (SSH). In order to do so, METRIS administers two functions: a system to collect information on the governance and state of affairs of research in SSH in Europe, and a system (with the help of this information) to facilitate expert reflection on the directions in which SSH could take in the future. In 2009, METRIS established a network of correspondents to collect information on SSH in 27 countries and released its first reflection report.

Network from Europe and beyond

In 2009, the European Network of Correspondents was established by METRIS to compile information on the governance and performance of SSH in Europe. The network is represented by the following 27 countries: Austria, Belgium, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Israel, Italy, Lithuania, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the UK. An expansion is planned for 2010 to include all EU Member States as well as the countries associated to the Framework Programmes.

The network has prepared a report on each of the 27 participating countries, which will become available on a dedicated website in 2010. The website will provide policy-making and other stakeholders with an overview of the state-of-the-art in SSH research across Europe. It will also provide access to detailed national reports and other services, such as comparative queries of the content of the reports, news about important events and developments in each country, links to interesting sites, and potential forums and public discussion functions.

Report on emerging trends

The first METRIS report, *Emerging Trends in Socio-economic Sciences and Humanities in Europe*, was published in 2009. The report was written by a group of 14 leading researchers. It analyses structural trends in the ERA, provides examples of cutting-edge SSH research, and identifies trends in SSH research, as represented by the five themes of the SSH Work Programme:

- Growth, employment and competitiveness in a knowledge-based society;
- Combining economic, social and environmental objectives;
- Major trends in society and their implications;
- Europe and the World;
- The citizen in Europe.

Another aim was to inform future work programmes of the European Commission, as well as national agencies with programmes in SSH fields.

Structural trends in the ERA

'We need a better understanding of how the ERA and other changes in organisation and funding impact on scientific research in the SSH,' the experts write. In addition, the lack of statistics on SSH research funding in Europe needs to be urgently addressed. And while 'deep' interdisciplinary research should be promoted, traditional studies by single scholars should not be neglected either.

On infrastructures, the experts note that large-scale digitisation projects could be extremely beneficial and lead to new research insights. Most digitisation projects are national in scope but there is significant potential for European added value.

Major trends in society and their implications

The slowing of world population growth, ageing societies and shifting migration flows are all opening up new avenues for SSH research. The report also identifies a revival of interest in phenomena such as interpersonal trust and individualised experiences, while new questions are being asked about the future of democracy and the rise of new forms of social activism and politics. Given the ongoing concentration of populations in cities, the experts predict an increase in research on urban sustainability.

Growth, employment and competitiveness

'The study of innovation and innovation systems is critical for understanding economic growth in Europe,' the report reads. Specifically, the impact of institutions on economic growth, and the financing of innovation and intellectual property (IP) will remain high on the research agenda. Research into human, social and cultural capital is growing, as is interest in creating new measures of value and productivity.

In the financial sector, the authors of the report expect that 'transmission mechanisms of financial crises across countries and from the financial to the productive sector are set to become the focus of much research'. Economic governance, and the pricing and treatment of risk are also research priorities.

The citizen in Europe

'Innovative research has emerged in such areas as the quality of democracy, democratic theory, comparative constitutional law and jurisprudence,' the report notes. Researchers are also exploring new forms of citizenship – ethnic, religious and sexual, for example. New forms of participation in public life, particularly by businesses through corporate social responsibility (CSR), are also attracting interest.

On migration, the management of migration flows at the European level is an important topic for research, as are the cultural expressions of migrant communities and the social, cultural and economic effects of migration.

Combining economic, social and environmental objectives

More and more SSH research is devoted to environmental issues, and work on the socio-economic consequences of climate change, the design of incentives for reducing pollution, and the pricing of natural resources is likely to gain in importance. New approaches to the analysis of social inequalities and globalisation are being developed, and alternative models of growth are being investigated.

Europe and the world

The EU's place in the world is still not well understood. Research also focuses on the question of European identity and the social and political dimensions of memory, as well as on the EU's role as a knowledge-based economy.

Beyond FP7

The expert group also identified trends that are not covered by the Seventh Framework Programme (FP7) but may be important for the future development of SSH. These include the study of visualisation and visual tools, a rethinking of traditional ideas of space and territoriality, research on affects and emotions, and the erosion of traditional boundaries in scientific research.



The dedicated METRIS website, <http://www.metrisnet.eu/>, will be launched in 2010. A copy of the report, *Emerging Trends in Socio-economic Sciences and Humanities in Europe*, is currently available from the SSH Programme website, http://ec.europa.eu/research/socialsciences/pdf/metris-report_en.pdf

SUPPORT TO THE EUROPEAN RESEARCH AREA AND EU POLICIES

Following the Ljubljana process launched early in 2008 and Vision 2020 announced later in the same year, the European Union initiated a new strategy for the European Research Area (ERA) in 2009. The objectives of this renewed strategy frequently call on insight, knowledge and approaches generated under the Socio-economic Sciences and Humanities (SSH) Programme, in particular through the programme's foresight and forward-looking activities.

Likewise, other initiatives within the Science, Economy and Society Directorate contribute to ERA implementation, including the Science in Society (SiS) Programme, promotion of an evidence basis for EU policy-making and actions that develop SSH infrastructures (mainly databases, indicators and modelling frameworks).

Forward-looking for ERA

The new ERA strategy is based, among others, on a set of 'grand challenges' as identified by EU Member States. Some research priorities, for instance, will be determined by their relevance to these challenges.

The main priorities of the ERA strategy, particularly Joint Programming, will be the subject of 'forward-looking activities' – a term that is broader in definition than 'foresight'. The remit of forward-looking activities includes horizon scanning, forecasting, vision-building, participative technology assessment and scenario building.

There is a need to combine various approaches and tools in order to imagine, debate on and ultimately, to shape our research futures. This particular SSH activity is developing the means to implement such a practice.

In 2009, SSH initiated six forward-looking research projects under the Seventh Framework Programme (FP7). These projects will be clustered, with synergies developed among them, so that they constitute an element of the support to the ERA. They include:

- FAR HORIZON (Use of Foresight to Align Research with Longer Term Policy Needs of the European Commission);
- IKNOW (Interconnecting Knowledge for the Early Identification of Issues, Events and Developments (e.g. wild cards and associated weak signals) Shaping and Shaking the Future of Science, Technology and Innovation in the ERA);
- INFU (Innovation Futures in Europe: a Foresight Exercise on Emerging Patterns of Innovation. Visions, Scenarios and Implications for Policy and Practice).

The ERA conference, which took place from 21 to 23 October 2009, included a session dedicated to forward-looking activities and their potential usefulness to the ERA strategy. Leading European foresight and forecast scientists presented their work to more than 120 experts and delegates from EU Member States. Participants concluded that forward-looking activities should underpin EU and national policies. Research and innovation policies, in particular, need forward-looking activities to ensure that long-term societal trends are taken into account during priority-setting, as are main global drivers, such as interdependencies between economic development, scarcity of natural resources, climate change, and the intensification of communication.

In addition, an expert group and the consortium on the AUGUR (Challenges for Europe in the world of 2030) project will start a forward-looking exercise on 'Europe and the World up to 2050'. Both will provide a basis for EU policies, in general, and the ERA in particular.

Evidence basis for EU policy-making

The usefulness of research for EU policies is a strong objective of the Lisbon and the ERA strategies. Intense efforts have been made in the SSH Programme in order to ensure the exploitation of research results; more than 100 workshops and seminars were held (involving researchers and policy-making), 10 major publications and 12 policy briefs were produced in 2009 alone.

Providing easier access to SSH infrastructures (databases and modelling) is also a way to facilitate the exploitation of knowledge for policy-making. In this context, new opportunities were made available in 2009 in cooperation with the Infrastructures activity of the Capacities Specific Programme.

What are Social Platforms? Focus on cities and social cohesion and on families

A significant innovation in ERA implementation has been the introduction of Social Platforms in the SSH Programme. The concept of this new instrument is similar to the Technology Platforms in that it aims (under the scope of social issues) to define a research agenda together with researchers, users and stakeholders.

Two platforms currently exist, which focus on 'cities and social cohesion' and on 'families'. They both served as pilot exercises in 2009 and have subsequently proved to be very successful. The first lesson from the experience of implementing Social Platforms has been that the scientific community and the actors concerned by the same social issues are really motivated by the platform's principle and way of working together. The participative approach, the opportunity to take stock of existing knowledge, and the foresight exercise provided dynamic stimulation for the participants.

Initial results have shown that key issues are identified quickly and accurately under the platforms. Two elements have been emphasised: the proposed research agenda (a key goal under the platform) is expected to be useful both for national and EU research; and the societal challenge and topics identified though the Social Platform will be considered for inclusion under the SSH Programme's calls for proposals and will be open to civil society organisations (CSOs).

As a result, a third Social Platform was announced in 2009 on sustainable lifestyles, and will be launched in 2010. The platform will relate to a broad spectrum of research activity, such as adaptation and mitigation to climate change, living conditions, health systems and behaviour, and energy and transport needs. Understanding future individual and collective behaviour (the evolution of lifestyle) is necessary to identify the most appropriate regulation.

More information on the European Research Area is available at http://ec.europa.eu/research/era/index_en.html

ADDRESSING THE FINANCIAL, ECONOMIC AND SOCIAL CRISIS

When the financial crisis materialised and spread rapidly across the European and global financial markets in late 2008 and early 2009, the Socio-economic Sciences and Humanities (SSH) Programme put measures in place to address these new developments in its current and future research strategies. The approach involved a variety of methods that would provide new knowledge on pressing issues in the short, medium, and long term.



Immediate actions administered by the SSH Programme focused mainly on the identification of existing, advanced-stage projects that could provide insight on the development of the crisis, as well as its causes and potential consequences. The process involved discussing with project coordinators the ways in which crisis-related issues could be better integrated into final research outcomes.

This proved possible in a number of cases, and produced a number of tangible results. One such result was an assessment of how the financial and economic crisis might influence global value chains. These value chains have evolved considerably in recent years and have brought about significant changes to the global division of labour. The analysis was conducted under the framework of the WORKS (Work Organisation and Restructuring in the Knowledge Society) project, and the finding was that the crisis has had an impact on global value chains.

The second type of action implemented promised effects in the medium term. This approach focused on identifying relevant projects in a relatively early stage or still under negotiation, and refocusing their research agenda (wherever feasible) to consider an in-depth assessment of the crisis' development and its consequences. These actions, among others, resulted in the introduction of new work packages in a number of projects with the aim to contextualise the research topic in the light of recent developments in the economy.

The current financial and economic crisis has been recognised as the most severe since the beginning of post-war European integration, and is thought to have significant consequences on Europe's economic and social development in coming years. Recognising this, the SSH Programme decided to give a prominent place to these challenges in its research strategy for the period from 2010 to 2013.

As a result, considerable resources will be invested in research in the last four years of the Seventh Framework Programme (FP7), specifically on the role of the financial system, the future of the public sector, the future of the banking sector, recovery strategies, and the role of the euro currency. In addition to these research areas, the context of the crisis will feature in research on employment, demography, innovation, and so forth.

Within the current portfolio of projects, the SSH Programme also funds a significant body of research in macroeconomics. This research aims to further develop macroeconomic models designed to measure the impact of different economic developments and public policy interventions, as well as on different economic parameters, such as output, employment and inflation.

In addition, the MONFISPOL (Modeling and Implementation of Optimal Fiscal and Monetary Policy Algorithms in Multi-country Econometric Models) research team, currently funded under FP7, is working on extensions to a numerical tool known as DYNARE. This tool is broadly used to calculate the macroeconomic models used by central banks in Europe and beyond and also by the European Commission's Directorate-General for Economic and Financial Affairs.



More information on the Socio-economic Sciences and Humanities Programme is available from the website, http://ec.europa.eu/research/social-sciences/index_en.html

ENERGY-TRANSPORT- ENVIRONMENT- LAND USE NEXUS

The EU needs to make a big transition in how it uses energy resources if it is to continue on the path of sustainable development while also dealing with the challenges of globalisation and climate change. The Socio-economic Sciences and Humanities (SSH) Programme supports research that focuses on sustainable development, with a particular focus on economic, social and human aspects, including individual energy use in households, businesses and industry, and on ways for all citizens to contribute to creating a greener economic society.

Worldwide demand for energy is soaring. Scientific and technological research is playing a vital role in developing new energy sources and carriers to reduce the EU's dependence on imported fuel, but producing cleaner energy is not the only answer. Cultural, social, economic and political factors have to be taken into consideration too.

As well as new forms of greener energy, there must be a strong public commitment to cutting down on wasteful energy consumption. Without this, greener energy technologies will not have a strong enough effect on emission levels, as nearly 35 % of energy use and 40 % of greenhouse gas emissions come from private households. As a response to such figures, the European Commission opened up a debate on the future of European energy policy.

Greener cities of the future

At a summit in December 2008, EU leaders reached agreement on an energy and climate change package, which included three major EU commitments: to reduce greenhouse gas emissions by 20 % by 2020, boost renewable energy sources by 20 % by 2020, and to improve energy efficiency by 20 %.

The agreement was prompted by a variety of factors, including concern over rising oil and gas prices and the EU's dependence on a small number of oil and gas suppliers. Currently, most forms of energy used in the EU are imported and this trend is projected to grow in the next two decades.

Oil and gas resources are dwindling and the drive to find alternative sources of energy has also been prompted by growing knowledge of the effects of global warming and climate change. Reducing energy consumption and greenhouse gas emissions and increasing the production of greener energy (while allowing

for projected rises in energy demand and securing reliable supplies of energy) is an enormous and complex challenge. Much stricter rules and agreements on reducing greenhouse gas emissions and developing cleaner energy sources need to be adopted by all EU Member States.

For instance, new development models combining economic, social and environmental objectives are needed in cities. Public transport, business and industry, leisure activities and work and home environments will all need to adapt to greener and fuel-reducing methods of operation by cutting down on the amount of energy they use. Greener technologies and behaviours must become part of day-to-day life.

SSH research and the energy shift

How energy use is managed in cities in the future will be of primary importance to a 'paradigm energy shift' and the SSH Work Programme is playing an important role in research into greener urban living.

The SSH Programme has funded research on patterns of energy use in cities, particularly relating to transport and housing. These have been quantified alongside new and emerging ways of energy production, such as the use of agricultural land for growing crops for biofuel. It also supports sustainable development by carrying out research projects into such important areas of economic activity as growth, employment, competitiveness, the knowledge society, energy, agriculture, rural and urban issues, demographics, cultural attitudes and quality of life.

One of these projects, GILDED (Governance, Infrastructure, Lifestyle Dynamics and Energy Demand: European Post-carbon Communities), is conducting five case studies in medium-sized cities to determine the sociological, cultural and political influences that affect energy use of individuals and households. By studying individuals and their lifestyle choices, the project aims to uncover patterns of energy use and the reasons behind relatively high energy consumption.

GILDED is also looking at the way that cities use energy. The ability of cities to operate on greener energy in the future and how far they can reduce energy consumption will be crucial factors for energy supply and availability in years to come. The project team's findings are being used in workshops to create new policy models for future energy consumption.

More information on the GILDED project is available at
<http://www.gildedeu.org/>

THE WORLD IN 2025

The Socio-economic Sciences and Humanities (SSH) Programme plays a central role in supporting the work of 'The World in 2025 Expert Group'. The group was created in 2008 to provide foresight, advice and scenarios to the EU based on development trends across the globe leading up to the year 2025. The group produced 2 publications in 2009 based on a foresight exercise that highlighted the main trends, tensions and transitions for the next 15 years. Their findings indicate bold strategies are needed for Europe to maintain its stronghold in key areas.

Economic, social, demographic and environmental changes are taking place at an unprecedented pace worldwide. Europe must address many challenges over the coming decades if it wants to retain its position as a leading player in such areas as science, research and industry.

In *Political Guidelines for the Next Commission* (http://ec.europa.eu/commission_barroso/president/pdf/press_20090903_EN.pdf) (September 2009), European Commission President José Manuel Barroso says Europe must answer a critical question: 'Do we want to lead, shaping globalisation on the basis of our values and our interests – or will we leave the initiative to others and accept an outcome shaped by them?'

The World in 2025 Expert Group carried out a foresight exercise based on this question. The resulting report, *Rising Asia and Socio-ecological Transition*, underlines the principle demographic and economic trends that are likely to occur over the next 15 years. The report was presented at 'The World in 2025 – Conclusions from the European Foresight Expert Group' seminar in Brussels on 24 September 2009, which was attended by more than 120 stakeholders from public authority, industry and civil society organisations.

Four themes were addressed at the event: key trends leading up to 2025 (e.g. demography, urbanisation, macroeconomic projections, education, science and culture); tensions in natural resources; potential transitions (e.g. the multi-polar world, socio-ecology, and beyond technological innovation); and EC foresight and forward-looking activities.

Research base will move towards Asia

The experts begin the *Rising Asia* report with the statement that by 2025 nearly two thirds of the world population will live in Asia, and that before 2025 China may be the second world economic superpower, and India the sixth. The experts also predict that by 2025 the US and the EU will have lost their technological and scientific lead, with the result that Asia will catch up and overtake both in scientific research.

The report also discusses Europe's 'brain drain' problem, and explores how to develop better 'brain circulation'. By 2025, over 645 000 Chinese and 300 000 Indian students will be studying abroad. The number of EU students and researchers working in China will have to increase in order to balance these figures. Scientific and technological advances will also lead to controversial and ethical questions that will have to be addressed.

International migration will continue to increase; without migrants the population of the EU will begin to decline from 2012. 'If current trends continue,' the report says, 'there will be almost 250 million migrants in the world in 2025, of which 65 % will be established in the developed countries.'

The expert group asserts that the global health situation is improving, but growing urban centres in developing countries may mean a rise in widespread diseases such as AIDS, whose victims are estimated to increase from 33 million today to 50 million in 2025.

Growing demand on energy resources

Conference participants at the event in Brussels heard that world energy demand will have increased by 50 % by 2025. The burning of coal for power stations in China and India will have risen by 50 %, and there will be greater use of other energy sources that are neither sustainable nor environmentally friendly (e.g. firewood from deforestation). By 2025, the EU will be importing almost 70 % of its energy needs.

According to the expert group, a series of 'wild cards' could act to shape events leading up to 2025. These include a major war, a technological disaster, a breakthrough in renewable energy production, a sudden acceleration in the impact of climate change or progress in the adoption of a system of world governance.

The report also identified a series of positive trends including drastic cuts in energy consumption by environmentally aware consumers who will walk more, take public transport, insulate their homes better, and cut down on energy waste at home and at work. Companies will carry out similar energy-cutting exercises, and renewable energy will be high on the agenda of every business and industry.

The World in 2050 Expert Group's second publication of 2009, *The World in 2025 – contributions from an expert group*, is an accompaniment to *Rising Asia and Socio-ecological Transition*. It consists of 16 in-depth analyses of current world conditions, 1 from each member of the expert group.

Subjects covered include macroeconomics, growth and trade, demographics in 2025, development and innovation, access to resources, democracy and world governance, and security and development in China. Scenarios for the next 15 years in these areas are also developed and presented in the publication.



The World in 2025 Expert Group was created by the Science, Economy and Society Directorate in collaboration with the Bureau of European Policy Advisers (BEPA). The members are: Marc Abeles, Gijs Beets, João Caraça, Lionel Fontagne, Thierry Gaudin, Nicole Gnesotto, Josephine Green, Giovanni Grevi, Irina Kuklina, Geoff Mulgan, Richard Portes, Mu Rongping, Luc Soete, Uno Svedin, Jacques Theys and Loukas Tsoukalis.

The work was mostly supervised by Jean-Michel Baer, Paraskevas Caracostas, Pierre Valette, Domenico Rossetti and Elie Faroult from DG Research and by Vasco Cal from BEPA.

Copies of *Rising Asia and Socio-ecological Transition* and *The World in 2025 – contributions from an expert group* can be downloaded from the SSH Programme's website at http://ec.europa.eu/research/social-sciences/reports_en.html

CONFLICT PREVENTION

The EU has a strategic, moral and economic interest in preventing or addressing violent conflicts at the earliest possible stage. A specific EU communication on conflict prevention sets out important guidelines on how this can be achieved and how more peace and stability can be created. To this end, the Socio-economic Sciences and Humanities (SSH) Work Programme has funded research on the complex roots of conflict: how it ferments in individuals and collectively, how it is fuelled and sustained, and how it can be prevented in the future.

When violent conflicts occur, such as those in the western Balkans, in the Middle East and in many other areas of the world, they cause trauma, hardship and poverty for thousands of people. Conflict mediation and transformation involves several 'tracks', including diplomatic negotiations, cooperation between civil society actors in divided societies, and third parties at the regional and international levels. Then, once the conflict ends, the process of reconstruction has to be undertaken, which involves institution building, huge economic costs and the difficult process of reconciliation (failure to achieve this may lead to the re-escalation of conflict).

The EU itself developed as a project for the promotion of peace and stabilisation after the tragic experiences of World War II. While decades of peace have been achieved for most European countries, bloody conflicts took place within Europe in the 1990s and continue to develop or erupt on other continents. For peace and trust to grow among nations, there need to be concerted efforts to improve regional integration, and for cooperation programmes to be instigated. EU efforts to help build stability and prevent conflict involve building scientific and trade links, supporting democratisation and fundamental rights, carrying out development policy and (since the development of the Common Foreign and Security Policy) through peace-keeping missions.

One of the most important ways to prevent conflict is by creating links between countries, culturally, socially, politically and economically. Dialogue is essential: the more nations and regions talk, the less likely conflict is to occur.

Analysing the roots of conflict

One third of the world's population is living in low-income and conflict-affected environments. Violent conflicts take place mostly in low-income countries and are initiated through human interaction. By analysing the lives of the people at the roots of conflict situations, we can begin to understand how prejudice, dislikes, hatred and resentment can evolve into conflict.

The SSH Programme supports research in the area of conflict prevention, such as that undertaken by MICROCON (A Micro-Level Analysis of Violent Conflict), a five-year project that began in 2007. Its objective is to approach the subject of violent conflict by looking at the evolution of conflict from a small/micro perspective (that is, taking households as a unit of analysis) rather than a large/macro perspective (focused on states). The project has two strands. The first involves the development of a multidisciplinary framework that takes into account many important factors in the origin of conflict, such as culture, anthropology, ethnography, history, international relations, politics, economics, psychology and sociology. In order to understand the complex roots of conflict, all these factors need to be taken into consideration. The second strand involves the creation of practical foundations for a new research agenda in conflict analysis.

MICROCON is focusing on eight areas:

- group formation, identities and mobilisation;
- contemporary conflicts and ethno-religious tensions;
- gender aspects of violent conflicts;
- migration, displacement and refugees;
- risk, security and coping mechanisms;
- poverty, inequality and social exclusion;
- violent conflict and health outcomes;
- governance and institutions.

Under MICROCON, experts from 16 countries are also carrying out 2 policy research projects: 'Conflict in the European Neighbourhood'; and 'Evaluating Conflict Interventions'. Both include a number of case studies and an analysis of the best way of linking violent conflicts and policy-making processes.

The dynamics of peace building

Another SSH project, the three-year JAD-PbP (Just and Durable Peace by Piece), which began in 2008, is focusing on the problems and challenges of building lasting and viable peace solutions.

Finding satisfactory peace solutions in war-torn areas is an enormous challenge. JAD-PbP's work involves analysing the effectiveness of current peace building strategies, particularly in the western Balkans and Middle East, and how successful they have been in bringing peaceful resolutions to conflict situations. It is focused on three challenges which are vital for building long-lasting peace: the quest for justice, the quest for durable peace, and the quest for effective strategies.

The project draws on expertise from political science, international law and international relations. Its objectives are to:

- enhance the conceptualisation of durable peace through methodological and theoretical strategies;
- analyse the democratic and legal accountability of peace building strategies, including the use of international law and the use of force for humanitarian reasons;
- examine how effective previous and current peace building strategies have been, and how much they have contributed to lasting peace;
- examine and compare the EU's peace building strategies in the Middle East and the western Balkans.



A MICRO LEVEL ANALYSIS OF VIOLENT CONFLICT

More information on MICROCON is available at <http://www.microconflict.eu/> and on JAD-PbP at <http://www.lu.se/just-and-durablepeace-by-piece>

The 2001 EU Communication on Conflict Prevention can be found at http://ec.europa.eu/external_relations/cfsp/crisis_management/docs/index_en.htm

HISTORY, IDENTITIES AND VALUES

What is the legacy of slavery and colonialism in European society? What do discrimination and tolerance mean? How can the notions they represent feed into today's reflections on European citizenship? To what extent should deeply held religious beliefs be allowed to shape our political institutions? The Socio-economic Sciences and Humanities (SSH) Work Programme has supported a variety of research projects that are helping to find answers to these questions, and whose results could ultimately contribute to the policy-making process.

Europe is an extraordinary mosaic of cultures, religions, identities, ethnic groups and languages. The European Commission has financed projects that explore and analyse the diversities and commonalities reflected in European societies, and that think about ways of better understanding the future of Europe. With the help of a wide range of disciplines, issues are explored (relevant to history, identity, values and religion, but also to literature and the arts) that develop and convey knowledge, attitudes and practices of and for European citizens.

Through these projects, the Commission aims to demonstrate that, along with the social sciences, humanities can make a positive contribution to European policy-making processes. Humanities scholars can offer a refreshing perspective on a range of issues because their research explores the origins and facets of creative capacities and cultural values, and is therefore well placed to provide crucial insight into the interaction between the individual and society.

The question of identity

Among the projects the SSH Programme has funded on this theme is the ENRI-East (Interplay of European, National and Regional Identities: Nations between States along the New Eastern Borders of the European Union) project. The research team's 11 partners, including 3 from the associated countries of Belarus, Russia and Ukraine, include sociologists, political scientists, historians and ethnographers. All are contributing to an interdisciplinary study that aims to develop an in-depth understanding of the formation of identity to explore the interactions between individuals and groups when state restructuring occurs.

The researchers are working with a sample group of 10 ethnic minorities who come from 'split' nations along eastern European borders to try to understand how their identities and regional cultures have formed and how they interact in their region.

Also focusing on identity is the EUROIDENTITIES (The Evolution of European Identity: using Biographical Methods to Study the Development of European Identity) project, which is carrying out research with five groups of people who have faced challenges concerning their identity. The groups include farm workers, economic migrants, technological workers, and adults who have experienced cross-border educational exchange schemes earlier in their lives. Through contact with the groups, the research team can formulate a clearer idea of the formation of identity from the point of view of the citizen rather than of the state. The aim of the project is to learn about how people can develop a sense of identification with Europe.

A fresh look at history

The diversity of Europe has many positive aspects but social, cultural, political and economic pressures can lead to prejudices against certain groups of people, such as ethnic minorities, travelling communities and immigrants. The EU is committed to encouraging cohesion, and to fighting xenophobia and bigotry in all its forms. But to tackle these complex subjects, Europeans must first understand them.

The CLIOHRES.net (Creating Links and Innovative Overviews for a New History Research Agenda for the Citizens of a Growing Europe) project has brought together researchers from a variety of backgrounds to address a range of issues relating to prejudice and tolerance in Europe. The project began from the premise that historians have a particularly important role to play in understanding what it takes to build an inclusive European citizenship. However, although most of the 180 researchers from 45 universities are historians, CLIOHRES.net also harnesses the talents of scholars from other fields, including geography, anthropology, theology, philosophy, sociology and archaeology.

The network has undertaken research on topics such as European politics, culture, religion, gender and regional identity. This work has shed light on diverse but related issues, such as citizenship, immigration, discrimination and tolerance. Six thematic workshops cover legislation, power and culture, religious and philosophical concepts, work, gender and society, frontiers and identity, and Europe and the world.

The project has generated a number of books and studies since it began in 2005, as well as a series for children based on the fictional hero Little Dragon Mu, which is intended to help children learn about tolerance and integration. In 2009, it published a fourth series of books based on its thematic workshops: *Institutional Change and Stability*, *Rebellion and Resistance*, *Routines of Existence*, *Faces of Death*, *Frontiers, Regions and Identities in Europe*, and *European Migrants, Diasporas and Ethnic Minorities*.

The SSH Programme has supported a number of other projects on similar themes, including the three-year REDCo (Religion in Education. A Contribution to Dialogue or a Factor of Conflict in Transforming Societies of European Countries) project, which explored how people can live together peacefully in spite of religious and cultural differences. Policy recommendations from the project have been presented in the European Parliament and the Council of Europe. These recommendations are available online in seven languages. Similarly, partners of the VEIL (Values, Equality and Differences in Liberal Democracies. Debates about Female Muslim Headscarves in Europe) project have drafted policy recommendations and presented them in the European Parliament.



More information on the projects featured is available from the websites listed below.

ENRI-East: www.enri-east.net/en

EUROIDENTITIES: www.euroidentities.org

CLIOHRES.net: www.clohres.net

REDCo: www.redco.uni-hamburg.de/web/3480/3481/index.html

VEIL: www.veil-project.eu

FUNDAMENTAL RIGHTS

Human rights are not always respected, even in countries where they are protected by law. Human rights are one of the fundamental values on which the EU is built, and are particularly important for EU democracy, the enlargement process, and EU external relations and neighbourhood policies. The Socio-economic Sciences and Humanities (SSH) Programme funds research in the area of fundamental rights in order to increase knowledge about why breaches of human rights occur and what actions can be taken to prevent them.



The EU Charter of the Fundamental Rights of the European Union, adopted in 2000 and which became part of the Lisbon Treaty that entered into force on 1 December 2009, lays out a list of the rights that an EU citizen and others can expect to be upheld. These include, among others, the right to liberty and security, the right to freedom of thought, conscience and religion, the right to vote, the right to asylum, the right to freedom of movement, and the prohibition of degrading treatment or punishment.

The Council of the European Union has also produced a number of guidelines on human rights issues, for example, the death penalty, torture, protection of the rights of the child, violence against women and girls, and international humanitarian law.

JURISTRAS case studies: <http://www.juristras.eliamep.gr/>

EURASIA-Net publications: www.eurac.edu/org/minorities/eurasia-net/index.htm

The EU Charter of the Fundamental Rights of the European Union: http://www.europarl.europa.eu/charter/default_en.htm

Council of the European Union: <http://www.consilium.europa.eu/>

Understanding fundamental processes

The existence of a strong fundamental rights policy is important for Europe at large and for the EU in particular. The accession of 12 new EU Member States from central-east and south-east Europe and of even more states to the European Court of Human Rights (most of them being new democracies and some of which are still suffering from the aftermath of ethnic conflict) means the workload and importance of the ECtHR is rising. The ECtHR is a judicial body formed as a result of the European Convention on Human Rights of 1950, and is thus at the origin of human rights protection in Europe.

The JURISTRAS (Strasbourg Court Democracy and the Human Rights of Individuals and Communities: Patterns of Litigation, State Implementation and Domestic Reform) project, funded under the SSH Programme, investigated how litigation processes were handled in the ECtHR between 2006 and 2009.

It studied the relationship between a court judgment on a country and how that country responds in terms of the legislation it passes, how the legislation is put into practice, the effect of judgments on legislative reform, and why and how countries breach ECtHR rulings.

JURISTRAS carried out case studies in eight EU Member States and Turkey. Each country was subject to an in-depth analysis of its legal processes and of the new legal practices the country had adopted to comply with ECtHR judgments.

On 18 June 2009, the researchers presented the case studies at their final conference, 'The European Court of Human Rights in the National Legal and Political Order – An Inquiry into the Implementation of Court Judgments and the Rights of Marginalised Individuals and Europe Minorities'. The reports are also available online.

Topics covered at the event included the protection of immigrants and asylum seekers, the impact of court judgments, the rights of religious and ethnic minorities, the creation of policies to prevent discrimination, facilitating and supervising the execution of ECtHR judgments, and how the ECtHR should react to slow or negligent execution of court judgments.

EU-Asia human rights collaboration

Promoting human rights throughout the world is in the interests of all democratic nations, especially as globalisation processes continue to gather pace. The EURASIA-Net (Europe-South Asia Exchange on Supranational (Regional) Policies and Instruments for the Promotion of Human Rights and the Management of Minority Issues) project was launched in 2008 and is also funded under the SSH Programme.

Its main aim is to develop a better understanding of how south Asia is defining and developing new political instruments to promote and protect human rights. EURASIA-Net is also putting measures in place to maintain a high level of research cooperation on this issue, to train young researchers and to maintain and advance dialogue involving policy-making and human rights activists. The ultimate objective is to lead to a framework for future research cooperation between Europe and south Asia on ethnic conflict.

In 2009, the project carried out dialogue-building activities, including conferences, presentations, summer schools, seminars, policy workshops and discussions. These activities covered a wide variety of subjects, including forced migration, protection of minorities, anti-terrorism cooperation, freedom of religion, conflict in tribal areas of Afghanistan and Pakistan, and ethnic conflict in Sri Lanka and other areas.

The knowledge gained during the project, which concludes in 2010, has been documented in three publications: *Europe's Ethnic Mosaic*, *Solving Ethnic Conflict through Self Government*, and *Assessment of Research Policies and Resources*.



SSH PROJECTS – EXAMPLES

The Socio-economic Sciences and Humanities (SSH) provide insight into key societal, economic and cultural challenges facing Europe and the world now and in the future. It is through this insight that solutions can be reached, and that opportunities for growth and prosperity can be realised. The projects below represent some of the many research activities funded by the SSH Programme in support of its eight core themes.

The knowledge society and the financial, economic and social crisis

Project acronym: FINNOV

Project title: Finance, Innovation and Growth: Changing Patterns and Policy Implications

Coordinator: Open University (United Kingdom)

Funded under: FP7–SSH

EU funding total: EUR 1.5 million

Website: <http://www.finnov-fp7.eu/>

The EU has set itself the goal of becoming a knowledge-based economy. To do this, however, it needs to be able to successfully translate knowledge and innovation into economic growth.

The three-year FINNOV project, which began in March 2009, aims to probe the factors behind this process, in particular the interactions between innovation and financial markets. One of the main goals of the project is to determine how European governments and institutions can ensure that the financial system supports investments in innovation in a sustainable and equitable way.

The first results from the project are expected in 2010. The findings should improve our understanding of the mechanisms of the recent financial crisis, and the links between technological change and stock market volatility. The project will also contribute to the debate on financial market regulation.

Meanwhile, FINNOV has already organised an international conference. The event, titled 'Financial Institutions and Economic Security', was held in London, UK in May 2009. Among other things, it addressed the crisis of capitalism, the new economy business model, the financial crisis and pensions, financialisation and the housing market, financial innovation, and mortgage security.

Project acronym: WORKS

Project title: Work Organisation and Restructuring in the Knowledge Society

Coordinator: Katholieke Universiteit Leuven (Belgium)

Funded under: FP6–SSH

EU funding total: EUR 3.8 million

Website: <http://www.worksproject.be/>

The four-year WORKS project, which came to a close in August 2009, set out to study how work is changing in the knowledge-based society. In a policy brief published in September, the partners summarise their findings and explain their implications for policy-making.

‘Those adversely affected by changes in work organisation are not being offered sufficient opportunities to improve their vocational prospects,’ the paper reads. ‘The EU should do more to promote a strategy of industrial innovation based on an educated workforce. Workers must be allowed to develop their abilities and collaborate in a more secure environment. Failure to implement this strategy could undermine European industry’s competitiveness.’

Other key messages from the project include:

- companies should develop ‘learning organisation models’ that develop employees’ abilities and enhance the firm’s capacity to innovate;
- workers should have a say in the restructuring process;
- instruments for worker representation should be improved;
- health and safety policies need to address the impacts of work standardisation and intensification;
- policy-making need to address rising inequality between regions, sectors and worker categories that can result from cost-cutting outsourcing strategies in response to the economic crisis;
- in the service sector, efforts should be made to upgrade jobs, reduce insecurity and support a better work-life balance.

Another important project in this area is PRIME (Policies for Research and Innovation in the Move Towards the European Research Area), which ended in October 2009. PRIME set up the European Network of Indicators Designers (ENID) to develop novel indicators for innovation to evaluate the success of research policies and activities in this respect. It also developed a database on the potential for innovation in universities across Europe and created a training programme on innovation studies for doctoral students.

More information: <http://www.prime-noe.org/>

Urban and regional issues

Project acronym: DERREG

Project title: Developing Europe's Rural Regions in the Era of Globalization: an Interpretative Model for Better Anticipating and Responding to Challenges for Regional Development in an Evolving International Context

Coordinator: Aberystwyth University (United Kingdom)

Funded under: FP7-SSH

EU funding total: EUR 1.5 million

Website: <http://www.derreg.eu/>

Globalisation represents a major challenge for Europe's rural regions, as it brings about significant social, economic, cultural and political changes. However, until now, there has been no overarching, integrated analysis of the impacts of globalisation on rural regions.

The DERREG project, which started at the beginning of 2009, aims to redress this problem. Ultimately, the eight project partners aim to produce practical recommendations that will help people working in regional development to better anticipate and respond to the challenges posed by globalisation.

Research under DERREG will be carried out in four main areas: (1) global engagement and the local embeddedness of rural businesses, (2) international mobility and the migration of rural populations, (3) environmental capital and sustainable rural development, (4) and capacity building, governance and knowledge systems.

This research is taking place in 10 case study regions: Jihomoravský kraj (Czech Republic), Regierungsbezirk Dresden (Germany), Saarland (Germany), Comarca de Verín (Spain), West Region (Ireland), Alytus (Lithuania), Westerkwartier (the Netherlands), Goriška Region (Slovenia), Pomurska Region (Slovenia) and Övre Norrland (Sweden).

The project plans to hold a policy dissemination workshop in Brussels in June 2010.

Project acronym: PACT

Project title: Pathways for Carbon Transitions

Coordinator: Enerdata (France)

Funded under: FP7-SSH

EU funding total: EUR 1.4 million

Website: <http://www.pact-carbon-transition.org/>

As part of its efforts to tackle climate change, the EU has set itself the goal of reducing greenhouse gas emissions by 20 % by 2020 (compared to 1990 levels). After that, further, deeper emissions cuts are likely. Achieving these goals will require massive behavioural changes on the part of both consumers and producers.

The aim of the PACT project is to paint a picture of the post-carbon society, and provide politicians and other decision-makers with the strategic information they need to turn this vision into a reality. PACT's 12 project partners are focusing their efforts in 3 areas, as follows.

1. What factors shape the demand for energy and how can energy demand evolve to fit in with a post-carbon society? On the infrastructure side, there are questions relating to infrastructure and land use from the renewable energy perspective. The project is also studying the impact of lifestyle and behaviour on this issue.
2. The next stage of the project involves delving further into the issues of urbanisation and land use, particularly with regard to renewable energy technologies.
3. Finally, the project is investigating the role of social forces and other stakeholders in the transition process towards the post-carbon concept.

Global economic governance

Project acronym: PEGGED

Project title: Politics, Economics and Global Governance: The European Dimensions

Coordinator: University of Oxford (United Kingdom)

Funded under: FP7–SSH

EU funding total: EUR 3.3 million

Website: <http://pegged.cepr.org/>

Patterns of international cooperation are changing; major international institutions are less dominant, and new market economies are emerging. Meanwhile, the financial crisis underlines the need for a clear, global system of macroeconomic governance. The PEGGED project is generating workable policy solutions that will help Europe to develop a vision of how global governance systems should evolve.

The project, which started in 2008, has already produced some interesting results. These include an analysis of the issues that the G20 needs to tackle in the areas of macroeconomic stability and financial regulation, and a call against short-sighted trade protectionism, which would have devastating social and economic impacts in rich and poor countries alike.

In February 2009, the project organised the 'Global Economic Governance' conference in Brussels, Belgium, which attracted over 100 participants, including EU Science and Research Commissioner Janez Potočnik, who delivered a speech on systemic challenges, institutional responses and the role of the new actors. Among other things, the conference assessed the role Europe could play in promoting the necessary changes in governance.

In 2010, the researchers plan to analyse the global financial crisis and determine effective policy responses to it. In addition, 2010 will provide the researchers with the opportunity to test the credibility and legitimacy of the G20 as a governance body.

Demography, migration and social inequalities

Project acronym: KATARSIS

Project title: Growing Inequality and Social Innovation: Alternative Knowledge and Practice in Overcoming Social Exclusion in Europe

Coordinator: Newcastle University (United Kingdom)

Funded under: FP6–SSH

EU funding total: EUR 767 000

Website: <http://katarsis.ncl.ac.uk/>

The KATARSIS project supported the view that people in need use certain types of knowledge and combine resources in novel ways. The strategies they develop in response to exclusion often differ in the ways knowledge and practices are used. These strategies trigger processes of social innovation that promote inclusion, empowerment and socio-economic development. As such, they open up new avenues for policy design and implementation.

The project, which ended in December 2009, created a platform uniting research teams in 18 institutions across 15 countries. As well as exchanging knowledge and coordinating their work, they analysed socially creative strategies through which people can react to economic, social or political exclusion.

In October 2009, the researchers organised a workshop in Brussels, Belgium for staff in European institutions. The event addressed the meaning of social innovation and its political relevance. Discussion also focused on the status of social innovation in governance, and the issue of 'action' research and its importance for 'social innovation' research.



Project acronym: MULTILINKS

Project title: How Demographic Changes Shape Intergenerational Solidarity, Well-being, and Social Integration: a Multilinks Framework

Coordinator: Netherlands Interdisciplinary Demographic Institute, The Hague/ Erasmus University Rotterdam (Netherlands)

Funded under: FP7–SSH

EU funding total: EUR 1.5 million


Website: <http://www.multilinks-project.eu/>

The aim of the MULTILINKS project is to study how demographic changes affect social integration, well-being and intergenerational solidarity in different countries. Currently, debates on ageing focus mainly on the elderly. However, ageing affects all age groups.

The project, which started in March 2008, is examining linkages within families (e.g. interdependencies between older and younger family members) as well as linkages across time, at different periods in the lives of individuals and families. Finally, the partners are studying the linkages between national and regional contexts (such as policies and economic circumstances) and individual behaviour, well-being and values.

During 2009, MULTILINKS produced papers on intergenerational family obligation, the geographic proximity of parents and their adult children, and the relationship between mothers' employment and the provision of informal childcare by grandparents. Other reports examine research methods for analysing intergenerational relationships across countries and an overview of national legislation regarding intergenerational relations.

A key message from the project for policy-making, businesses and other stakeholders is that 'family solidarity is a great resource, which needs to be both supported and partly lightened'.



At the other end of the demographic scale, the REPRO (Reproductive Decision-making in a Macro-Micro Perspective) project studies the factors that drive changes in birth rates and influence the reproductive decision-making of contemporary Europeans. In the first phase, the project analysed the impact of the gross domestic product on fertility in OECD (Organisation for Economic Co-operation and Development) countries (the macro perspective) as well as the cross-national differences in perceived norms concerning fertility-related behaviour (the micro perspective). The REPRO partners also initiated the construction of a fertility database that contains comparable fertility data for various countries in Europe and beyond.

More information:

<http://www.oeaw.ac.at/vid/repro>

<http://www.humanfertility.org/>

Citizenship, democracy and media

Project acronym: EuroPolis

Project title: A Deliberative Polity-making Project

Coordinator: University of Siena (Italy)

Funded under: FP7-SSH

EU funding total: EUR 1.2 million

Website: <http://www.europolis-project.eu/>

The EuroPolis project is examining how people's attitudes towards EU issues change as a result of exposure to information, and what implications this may have for political participation and voter turnout. The European elections in May 2009 gave the researchers an excellent opportunity to carry out a unique experiment in informed decision-making. In a 3-day dialogue, 348 citizens from across the EU discussed topics such as immigration, climate change, and the EU itself with experts and politicians.

The preliminary results of this experiment reveal that citizens indeed change their views on 'hot topics' if given the chance to discuss them. In fact, participants became noticeably 'greener', more tolerant and more pro-European during the experiment. At the start of the event, just 37 % considered their country's membership of the EU to be 'a very good thing'; by the end of the event, this figure had risen to 52 %. Support for rights for illegal immigrants also rose, as did enthusiasm for measures to combat climate change.

On a party level, the Greens saw their support among participants rise, while the conservatives' share of the vote fell. Regarding voter turnout, the percentage of participants who considered it their duty to vote in European elections increased from 47 % to 56 % over the weekend.



Project acronym: MEDIA & CITIZENSHIP

Project title: Media and Citizenship: Transnational Television Cultures Reshaping Political Identity in the European Union

Coordinator: University of Utrecht (Netherlands)

Funded under: FP7-SSH

EU funding total: EUR 1.2 million

Website: <http://www.media-citizenship.eu/>

Many EU citizens have strong family and linguistic ties to other parts of the world. Europe's Arabic speakers, for example, can watch over 300 satellite television channels, ranging from international channels to channels run by national broadcasters. The MEDIA & CITIZENSHIP project is investigating what kinds of channels Arabic speakers in the EU are watching, and how their choice of channels affects their understanding of their role in Europe.

The researchers presented their initial results at a conference in Utrecht, the Netherlands in April 2009. The findings suggest that there are two types of Arabic-speaking viewer. 'Translocal' viewers are found predominantly in countries like France, the Netherlands and Spain, where most Arabic speakers are of African origin. These people usually watch national channels from their country of residence or national channels from the family's country of origin (such as Algeria or Morocco).

'Transnational' viewers are more common in areas where there are more Middle Eastern immigrants, such as the capitals of Germany, Sweden and the UK. They opt for international channels like Al Jazeera, BBC Arabic and CNN.

These results are still tentative. Meanwhile, with over 2 000 responses to its surveys and over 600 completed television diaries, the project has amassed a wealth of data. The project partners eventually plan to make a documentary about their findings.

Project acronym: CRIME AND CULTURE

Project title: Crime as a Cultural Problem. The Relevance of Perceptions of Corruption to Crime Prevention. A Comparative Cultural Study in the EU-Accession States Bulgaria and Romania, the EU-Candidate States Turkey and Croatia and the EU-States Germany, Greece and United Kingdom

Coordinator: University of Konstanz (Germany)

Funded under: FP6-SSH

EU funding total: EUR 1.1 million

Website: <http://www.uni-konstanz.de/crimeandculture/index.htm>

The CRIME AND CULTURE project, which concluded in July 2009, set out to investigate people's perception of corruption in a number of European countries. The project's objective was to generate findings that could be applied to improve current national and international counter-corruption efforts.

The project partners found similarities and differences in both the underlying causes of corruption and perceptions of corruption in the seven countries studied. However, despite the differences, the project notes that anti-corruption work should be seen as 'a long-lasting learning process' in all countries and regarding both petty and 'grand' (structural) corruption. Both civil society and the media have a major role to play in combating corruption, the researchers note in a policy brief.

The project held its final conference in Brussels, Belgium, in July 2009. Meanwhile, the University of Konstanz will build on the work begun in CRIME AND CULTURE in a new EU-funded project called ALACs (Advocacy and Legal Advice Centres).



Languages

Project acronym: LINEE

Project title: Languages in a Network of European Excellence

Coordinator: University of Bern (Switzerland)

Funded under: FP6–SSH

EU funding total: EUR 5 million

Website: <http://www.linee.info/>

The aim of the LINEE project, which will end in October 2010, is to create a sustainable network of researchers to study and raise the visibility of linguistic diversity throughout Europe and beyond. The project has produced many interesting results. For example, under the research area 'language and economy', the researchers found that because some low-level jobs need no sophisticated language skills, migrants doing them have difficulties with improving their language competence and lack the motivation to do so.

Another part of the project has found that using English as a lingua franca (a language used by people who do not share the same mother tongue) does not necessarily discourage people from learning further languages, and that native speakers of English are not necessarily more successful in communicating in multilingual contexts than non-native speakers of English.

In June 2009, the project organised a five-day 'training institute' for PhD students in Prague, Czech Republic and in September the project partners contributed to the Sixth International Conference 'Third Language Acquisition and Multilingualism' in Italy. LINEE will hold its final academic conference in April 2010 and a non-academic conference reaching out to stakeholders and the public in Brussels in September 2010.

Another important project in this area is DYLAN (Language Dynamics and Management of Diversity), which is investigating linguistic diversity in Europe's knowledge-based society. Among other things, 2009 saw the project investigate the importance of multilingualism as a source of creativity and innovation, in recognition of the fact that the European Commission declared 2009 the Year of Creativity and Innovation. Another part of the project is analysing companies' websites with a view to determining whether different languages are treated in the same way or not, and whether companies reaching out to local markets go beyond simple translations and adapt texts to the local culture, for example.

More information:
<http://www.dylan-project.org/>



Gender

Project acronym: FEMCIT

Project title: Gendered Citizenship in Multicultural Europe: the Impact of the Contemporary Women's Movements

Coordinator: University of Bergen (Norway)

Funded under: FP6-SSH

EU funding total: EUR 4 million

Website: <http://www.femcit.org/>

One of the main aims of the FEMCIT project is to assess the current state of women's citizenship in Europe, and to study how this is affected by economics, class, politics, sexuality and ethnicity/religion. In addition, the researchers are seeking to produce a new, interdisciplinary understanding of gender-fair citizenship in Europe, and develop policy recommendations to promote the full citizenship of women.

The project produces reports for policy-making and academics, scientific papers for journals, books, and articles aimed at the general public. The FEMCIT team also presents its work at diverse conferences around the world.

In January 2009, FEMCIT held the First European Conference on Politics and Gender in Belfast, UK, an event which attracted over 250 participants and provided FEMCIT researchers with an excellent opportunity to promote their work. FEMCIT researchers also participated in the Seventh European Feminist Research Conference in Utrecht, Netherlands in June 2009. Later in the same month, 18 PhD students from across Europe gathered in Warsaw, Poland for a week for the FEMCIT PhD course.

Looking to the future, a major item on the agenda in 2010 is the conference 'Beyond Citizenship: Feminism and the Transformation of Belonging', which will be held in summer 2010.

Two other important projects in this area are Ge.M.IC (Gender, Migration and Intercultural Interactions in the Mediterranean and South East Europe: an Interdisciplinary Perspective) and GENDERACE (The Use of Racial Anti-discrimination Laws: Gender and Citizenship in a Multicultural Context).

Ge.M.IC aims to identify the links between migration, gender and intercultural interaction, with a particular focus on how migrant mobility and cultural diversity affects gender relations in the country of origin, and the host and transit countries. In 2009, the partners finished their fieldwork and embarked on the analysis of their findings. The project is scheduled to release a number of reports on its work in 2010, covering subjects like violence, mixed and transnational families, religion, and intercultural education.

The GENDERACE project is evaluating the effectiveness of racial discrimination laws from the point of view of the target group and from a gender perspective. The researchers' hypothesis is that women and men experience discrimination differently and that the interaction between gender and race discrimination is too often ignored. Among other things, the project has found that although EU laws have given greater recognition to the idea of multiple discrimination, there is still a need for explicit and binding regulations in national legal systems to consider multiple grounds in discrimination cases. Studies of multiple discrimination should always take local contexts into account. GENDERACE will hold its final conference in Brussels, Belgium in spring 2010.

More information:

Ge.M.IC: <http://www.gemic.eu/>

GENDERACE: <http://genderace.ulb.ac.be/>



Forward-looking activities

Project acronym: EFMN

Project title: European Foresight Monitoring Network

Coordinator: TNO Strategy, Technology and Policy (Netherlands)

Funded under: FP6–SSH

EU funding total: EUR 1 168 800

Website: <http://www.efmn.info/>

Foresight refers to the process of creating shared, long-term visions to inform decision-making in the short term. The aim of EFMN is to systematically monitor foresight activities as a tool to support policy or strategy development in science, technology and innovation (STI). The network brings together over 180 correspondents, holds 4 annual issue analysis workshops, has produced over 160 briefs, and has identified over 2 000 foresight initiatives so far in Europe and other world regions (including Latin America, North America, Asia and Oceania).

The network's briefs cover issues as diverse as consumers, intellectual property rights, water stress, population growth, infectious diseases, energy, care for the elderly, transport, deforestation, and ethics.

EFMN's work is highly respected. By identifying the big scientific, technological and social challenges of tomorrow and bringing relevant information on crucial societal topics to the attention of the foresight community and policy-makers, EFMN was considered to be one of the most valuable current foresight initiatives.

In 2009, the project received the Bled Forum Award for its efficient promotion of foresight. Two papers from the network were also recognised in the 2009 Emerald Literati Network Awards for Excellence, which highlight the most impressive pieces of work seen by *Emerald* journals' editors in 2008. The article 'How are foresight methods selected?' won an Outstanding Paper award, while the article 'Comparing foresight style in six world regions' was listed as 'highly commended'. In May 2009, the UK's Parliamentary Office of Science and Technology cited the EFMN as the most comprehensive database of futures activities available.

EFMN publications include *Collection of EFMN briefs: Part 1 and Part 2, Mapping Foresight – Revealing how Europe and other world regions navigate into the future (report)*, *Monitoring foresight activities in Europe and the rest of the world (2004-2008) (final report)*, and *Healthy ageing and the future of public healthcare systems (a special issue on healthcare)* (http://ec.europa.eu/research/social-sciences/reports_en.html).



SSH EVENTS – EXAMPLES

Each year, the Socio-economic Sciences and Humanities (SSH) Programme supports, organises and/or participates in a range of events to help realise its objectives. In 2009, several conferences, forums, and events were held in Europe and across the globe on important issues affecting the SSH field, a selection of which are highlighted below.

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EU-CONSENT Final Plenary Conference – 'Deepening and Widening of the European Union: The EU-CONSENT Network of Excellence'
26-27 March 2009, Brussels, Belgium

What are the consequences of EU enlargement on the region's internal and external procedures, as well as on its Member States? The Network of Excellence EU-CONSENT (Constructing Europe Network) tackled this question at the two-day conference and provided important answers.

The project's main objective was to kick-start a 'new Europe' in the period from 2005 to 2009. Key actors from diverse sectors across Europe, including economists, historians and sociologists pooled their resources to shed light on the consequences of the EU's expansion. EU-CONSENT focused on the relationship between two processes generally considered to be mutually exclusive: the deepening (the transfer of national competencies to the EU level) and widening (accession of new Member States) of the EU.

One of the project's most important results highlighted at the conference was that the deepening and widening processes are significantly linked to all areas of European integration. A case in point is the fact that expansion increases the degree of inequality, which in turn calls for stronger institutions and greater solidarity among actors.

As regards the central role institutions play in the EU system, EU-CONSENT found that regardless of the entry of 12 new Member States to the EU from 2004 to 2007, the Commission, Council and Parliament were (and still are) instrumental in maintaining smooth and effective institutional and procedural measures.

Ultimately, EU-CONSENT found that the growing number of Member States did not obstruct the system and thus did not jeopardise a central element of legitimacy for the EU.

More information: <http://www.eu-consent.net/>



CHALLENGE Art Exhibition
18-29 May 2009, Brussels, Belgium

This exhibition was organised by the Centre for European Policy Studies (CEPS), in cooperation with the Directorate-General for Research. Its aim was to present the themes of the CHALLENGE (The Changing Landscape of European Liberty and Security) project, which received EUR 4.5 million under the Policies Thematic area of the EU's Sixth Framework Programme (FP6).

The 12-day exhibition featured the works of Charlesworth, Lewandowski & Mann, Charlie Coffey, Richard Hards, Ilias Poulos and Mark Titchner. The artists provided a space for exploring the terrain of security and liberty in a context that is constantly framed by discourses of threat and danger. The results were impressive, effectively shedding new light on the liberty and security of Europe.

More information:
<http://www.libertysecurity.org/>



'Sustainable Development – A Challenge for European Research: Global Change, Economics, Employment, Behaviour and Territorial Dynamics Session' 26-27 May 2009, Brussels, Belgium

Organised by the Directorate-General for Research in cooperation with the Czech Presidency of the EU, this conference focused on the role of research in sustainable development. Day 2 of the conference focused on the session 'Global change, economics, employment, behaviour and territorial dynamics', chaired by Jean-Michel Baer, Director of the Science, Economy and Society Directorate. The session brought together 130 representatives of the political, research, industry and social sciences spheres.

The participants highlighted the significance of research, and assessed what R&D is capable and incapable of doing for the sustainability challenge. Topics discussed were social behaviours and long-term patterns, green economy and green jobs, urbanisation and land use, and the global crisis and global challenges.

The session determined that, among others, new job opportunities should emerge in the context of a socio-ecological transition in Europe, and that poverty should be dealt with in the context of urbanisation in developed and developing countries. Ultimately, one of the key messages outlined at the session was that sustainability is possible as long as 'social' choices are made and economic incentives become available. A publication detailing the proceedings of the conference is available "People, the economy and our planet – Sustainable development insights from socio-economic sciences and humanities (http://ec.europa.eu/research/social-sciences/pdf/people-economy-and-our-planet-sustainable-development_en.pdf).

More information:
http://ec.europa.eu/research/social-sciences/events-54_en.html



ERA conference – 'Which forward-looking activities can support the future development of ERA?'

21-23 October 2009, Brussels, Belgium

A successful European Research Area (ERA) hinges on solid regional and international cooperation. Crucial to this endeavour are the establishment of joint programming and infrastructures, and the increase of knowledge transfer.

The focus of this conference was the development of central ERA policy initiatives. Organised by the 'Research in the economic, social sciences and humanities – Prospective Unit' within the Socio-economic Sciences and Humanities Work Programme, the conference was chaired by Göran Marklund, Head of Strategy Development Division, Deputy Director General, Swedish Governmental Agency for Innovation Systems.

The spotlight was on central issues that could impact the future of the ERA, including how to:

- arrange an ongoing process of forward-looking and horizon-scanning activities for the ERA in the future;
- guarantee further support and integration of national research policies in the ERA;
- determine the drivers that could fuel joint programming priorities and promote grand challenges for national and regional policy-making.

In general, the European Commission and national governments have long supported forward-looking activities regardless of their nature – be they qualitative or quantitative, operational or spontaneous, and based on participative or expert-formulated opinions. This holds especially true for parties wanting to gain a stronger foothold on meeting the challenges of the future.

A true meeting of the minds effectively gives everyone involved the motivation and drive to make the ERA the best it can and should be.

More information:

http://ec.europa.eu/research/conferences/2009/era2009/index_en.htm



SSH PUBLICATIONS – EXAMPLES

The various projects and activities supported by the Socio-economic Sciences and Humanities (SSH) Programme often have a publishing component, where ideas, results and perspectives are documented in order to be used by researchers and members of the general public alike. The publications briefly summarised below are some of the many books and documented research material produced under the SSH Programme. Links to the publications or to more information are available from the programme's website (http://ec.europa.eu/research/social-sciences/library_en.html).

European Research – Socio-economic Sciences and Humanities: List of projects 2007–09

This publication gives readers an overview of around 100 projects dealing with EU policy priorities. These projects represent an investment of EUR 130 million made by the Socio-economic Sciences and Humanities (SSH) Work Programme under the Seventh Framework Programme (FP7) between 2007 and 2009.

Each project is highlighted across a two-page factsheet that includes its objectives, funding details, partner lists and contact points for further information. They are arranged into seven chapters central to the SSH Programme: (1) growth, employment and competitiveness in a knowledge society, (2) combining economic, social and environmental objectives in a European perspective, (3) major trends in society and their implications, (4) Europe in the world, (5) the citizen in the EU, (6) socio-economic and scientific indicators, and (7) foresight.

In the foreword to the publication, Director of the Science, Economy and Society Directorate Mr Jean-Michel Baer explains: 'Better understanding and improving the knowledge on these activities and policies is a major challenge

for European researchers in the field of Socio-economic Sciences and Humanities. But the results of these scientific works can help Europe to face the major societal challenges of today and tomorrow!'



Towards Greater Corporate Responsibility: Conclusions of EU-funded Research

This policy review was developed by corporate social responsibility (CSR) specialist Albert Schram, who assessed four CSR research projects implemented in the period from 2005 to 2008 during the Sixth Framework Programme (FP6).

CSR can be defined as the way in which companies integrate social and environmental concerns into both their business operations and in their dealings with stakeholders. However, agreeing on a definition for CSR, points out Mr Schram, is not an easy feat. He cites several definitions, including that used by the International Organization for Standardization (ISO 26000), which incorporates seven key topics: (1) community involvement and development, (2) human rights, (3) environment, (4) organisational governance, (5) labour practices, (6) consumer issues, and (7) fair operating practices.

The four research projects reviewed in the study are:

- CSR PLATFORM (European Platform for Excellence in CRS Research);
- ESTER (Social Regulation of European Transnational Companies);
- RARE (Rhetorics and Realities – Analysing Corporate Social Responsibility in Europe);
- RESPONSE (Understanding and Responding to Societal Demands on Corporate Responsibility).

The publication is divided into four key chapters, which explore the European policy context, and provide an overview of CSR research, research results and recommendations. Several boxed inserts also highlight topical themes such as key policy documents, key policy milestones, and CSR in new Member States.

In his concluding remarks, Mr Schram says, 'These projects contributed substantially to clarifying CSR principles and drivers, and started unveiling the first empirical evidence on outcomes in Europe.' He adds that opportunities for further research now exist via the social policies of companies and their final outcomes and impact on society.

Moving Europe – EU Research on Migration and Policy Needs

Demography, migration, integration and social cohesion are key elements for the development of Europe, and are instrumental in fuelling the EU's stronghold on the global stage. This publication highlights the results of projects investigating the area of migration and migrant integration over a five-year period. These projects both established and promoted collaboration amongst researchers from different parts of Europe, and consolidated knowledge in the area for policy development.

Key issues tackled by all project partners included social, political and economic concerns, such as social inclusion and cohesion, welfare, ageing, education, gender, health, climate change, and economic growth and instability. The projects uncovered new and emerging migration trends, provided an account of what is going on in migration in the EU, and pinpointed the people affected by these issues.

The report highlights the development of novel theoretical concepts, approaches and methodologies undertaken by the various consortiums, and the production of reliable statistics in the field of migration. It also sheds light on comparative studies that focused on women migrants, citizenship issues and transnationalisation.

What is clear, according to the report, is that an integrated approach is needed for policies due to the highly interconnected aspect of various social policy areas. Smaller policy initiatives need to be integrated with larger ones, including economic and social policies, to ensure fruitful outcomes in Europe.



Anthropological Perspectives in a Changing Europe: Bringing People In

This report is based on a seminar that took place on 23 and 24 October 2008 to encourage the participation of humanities scholars in the Socio-economic Sciences and Humanities (SSH) Work Programme and to contribute to the preparation of its 2010-2013 road map. Eighteen participants from Europe and beyond discussed ways in which anthropological research could help 'bring people in' (involve the European citizen), with a particular focus on the questions below.

- What is the current state of anthropological research on Europe and Europeans?
- How can anthropology help us to understand how abstract notions, such as 'Europe', 'European' and 'European citizenship', are enacted and embodied by individuals in their everyday lives?
- How can anthropology shed light on the way individuals in Europe experience and react to globalisation?

Themes and issues identified during the seminar were examined by personnel from the SSH Programme, and were used (where possible) in drafting the research challenges and subjects for the remainder of the Seventh Framework Programme.

European Research on Youth – Supporting Young People to Participate Fully in Society – The Contribution of European Research

The EU recognises how important young people are to the future of the region. It also recognises that they face some of the toughest problems today, such as unemployment and social dissatisfaction. This policy review highlights potential approaches to guarantee young people's social inclusion and entry into the professional world, and ultimately to strengthen their role as citizens in European society.

More specifically, the publication explores and presents the results of key projects focusing on youth-related socio-economic issues funded under four successive Framework Programmes (FP4, FP5, FP6 and FP7). Some of the projects date back to 1996, while others will run until 2013. Recommendations and strategies have been identified and presented in order to support policy-making, stakeholders and those working with young people (including employers) in evidence-based policy-making at the national and European levels.

European Research on Youth stresses how a young person's European identity is related to policy measures that boost impartiality amongst societies. The publication also stresses the significance of education and a flexible transition to the world of work. Although without a formal education, young people may not have the leverage they need to become active and responsible professionals, informal learning and networking are also important for building young people's identities and for acquiring transversal skills.

On the whole, when policy is developed with youth, an environment is established that allows them to evaluate and assess their identity. Not only does this encourage social responsibility, but it helps young people understand who they are, where they came from, and what their future holds.



Mediterranean – Horizons and Challenges of the 21st century

The Mediterranean is a melting pot of civilizations whose originality lies in a history of influences and convergences. It has also been the centre of great conflicts, and a hub for trade and exchanges. This publication develops the major research lines of the Ramses2 (Network of Research Centres in Human Sciences on the Mediterranean Area) project, whose overarching goal was to establish a new domain of comparative studies: Mediterranean studies.

Key questions explored in this publication relate to social, political and strategic concerns linked to religion, migration, identity, gender, mobility, the political sphere and the energy issue. It also addresses the previous Euro-Mediterranean Partnership (launched in 1995 as a way of strengthening relations) and its evolution into the more recent Union for the Mediterranean (launched in 2008).

The report highlights the challenges faced by this region today: the nature of the political evolution in the south, the importance of religion in these societies (and the need to analyse their paradoxical evolution), and the nature of the partnership promise and its impact on the future of these societies. It also analyses the shortcomings of the Euro-Mediterranean Partnership, and the extent to which the Union for the Mediterranean may address these.

This publication is produced on the recommendation of scientific experts that have evaluated the network's work. A series of publications also present the different issues facing the region today, and is available on the Ramses2 network website (<http://ramses2.mmsh.univ-aix.fr/>).



Gender Politics and Democracy in Post-socialist Europe

The inclusion of women in politics and political decision-making is one of the basic principles of democracy. But how representative is this of reality? This book examines the link between women's membership of national parliaments and the substantive representation of gender interests. It investigates the role of civil society, the state and the European Union in representing women's interests and in promoting gender politics.

By revisiting the work of political theorist Hanna Pitkin, the publication adds to the classic political questions of who represents, what is represented, and how representation takes place. Using new research, the work represents the first comprehensive, comparative analysis of the interplay between emerging democracies and gender politics in post-communist Europe.

Editors Yvonne Galligan, Sara Clavero and Marina Calloni-Barbara conclude that 'democracies in post-socialist societies were actively exclusive rather than inclusive when it came to gender politics. With women constituting a modest proportion of legislatures, we found that they faced challenges in having their voices heard in the representative and participatory democratic structures'. They add that although this was not a novel finding, they were able to shed light on the factors involved in this issue, with gender role stereotyping at the heart of the problem.

Research conducted and used for this publication was supported by the EGG (Enlargement, Governance and Gender) project under the Fifth Framework Programme (FP5) and the RECON (Reconstituting Democracy in Europe) project under the Sixth Framework Programme (FP6).

Series of policy briefs on FP6 and FP7 projects

Policies underpin the work of the Socio-economic Sciences and Humanities (SSH) Programme. They provide the impetus and direction for future research, and contribute to finding solutions to some of society's challenges.

A series of policy briefs have been produced on projects funded under the Sixth and Seventh Framework Programmes. The aim of these briefs is to communicate insights in a structured way in only a few pages. They provide information 'at a glance' on topics such as results and comparisons in Europe, new knowledge, methodologies used, and contact points for further information.

Policy briefs on the following projects are available from the SSH Programme website (http://ec.europa.eu/research/social-sciences/policy_en.html):

- Intangible Capital and Innovation: Drivers of Growth and Location in the EU (INNODRIVE);
- A European Approach to Multicultural Citizenship Legal Political and Educational Challenges (EMILIE);
- Impact of Networks, Globalisation, and their Interaction with EU Strategies (INGINEUS);
- Governance, Infrastructure, Lifestyle Dynamics and Energy Demand: European Post-carbon Communities (GILDED);
- Tackling Social Exclusion through Social Innovation: Strategy Research Options (KATARSIS);
- Work Organisation and Restructuring in the Knowledge Society (WORKS);
- Strengthening the Role that SSH have on the ERA development by Reinforcing Interactions between SSH and non-SSH Research Communities (PLATON+);
- Social Sciences and European Research Capacities (SS-ERC);
- Social Capital and Cohesion: Towards a Common Good (SOCCOH);
- Measurement of Crime and Evaluation of Public Policies of Prevention and Security (CRIMPREV);

- The Contribution of Public and Private Services to European Growth and Welfare, and the Role of Public-Private Innovation Networks (SERVPPIN);
- Inequality: Mechanisms, Effects and Policies (INEQ);
- Media and Ethics of a European Public Sphere from the Treaty of Rome to the 'War on Terror' (EMEDIATE);
- Knowledge-based Entrepreneurship: Innovation, Networks and Systems (KEINS);
- Challenges and Prospects of Cross Border Co-operation in the context of EU Enlargement Society (CBCED);
- Job Mobilities and Family Lives in Europe: Modern Mobile Living and its Relation to Quality of Life (JOBMOB & FAMLIVES).





***SCIENCE IN
SOCIETY
PROGRAMME:
HIGHLIGHTS***

SIS WORK PROGRAMME 2009 AND SELECTED PROPOSALS

In 2009, the Science in Society (SIS) Work Programme administered one main call for proposals, resulting in over EUR 30 million in funding support. A total of 15 projects comprising 180 participants from Europe and around the world will generate knowledge on a range of topics, including ethics, women in science, science education, university-based research, public engagement in science, and strengthening the European Research Area (ERA). In 2010, the SIS Work Programme will take on a new direction (details of which are also provided in this publication).

Background on the 2009 SIS call

Published: 3 September 2008

Deadline: 13 January 2009

EU funding total: EUR 31.79 million

The following nine topics were presented in SiS-2009-1 under the overarching themes of ethics and governance, science education, and gender issues.

1. Privacy and emerging fields of science and technology: ethical, social and legal aspects.
2. Networking and capacity building activities to support ethics committees.
3. Structuring Public Engagement in Research (PER).
4. Governance and ethics of the responsible development of nanosciences and nanotechnologies.
5. Involving research bodies in the debate on gender and research.

6. Mobilising science centres and museums on women and science.
7. Supporting and coordinating actions on innovation in the classroom: dissemination and use of inquiry-based teaching methods on a large scale in Europe.
8. International dimension of research on science education.
9. Platform of networks grouping science museums, organisers of science events and the cities.

A total of 101 proposals were received, comprising Collaborative Projects (small or medium-scale focused research projects, and Specific International Cooperation Actions), Coordination Actions and Support Actions. These were assessed by 43 experts in February and March 2009, and 15 projects were selected for funding.

These projects involve 180 participants from the higher education, research, and public and private sectors. Combined, they represent 27 EU Member States, 5 associated countries (Israel, Norway, Serbia, Switzerland and Turkey), and several third countries (partners from outside the EU), including Argentina, Brazil, Canada, Egypt, India, Japan, Lebanon, Malaysia, Mexico, South Africa and Taiwan.

Some examples from this funding round are presented below.

Bridging the science and society gap

Project title: Public Engagement with Research and Research Engagement with Society (PERARES)

EU funding total: EUR 2.7 million

The aim of the project is to strengthen the interaction between researchers and civil society organisations (CSOs) in Europe. To do so, the partners will organise several transnational debates on scientific research, in addition to several communication exchanges (or 'dialogues'). The team will pursue the active participation of researchers and CSOs, and help both CSOs and the general public to articulate and identify their research questions at the events. The ultimate objective for the consortium is to draw out a list of themes (related to nanotechnology, domestic violence, and issues relating to Roma people and similar groups) and add these to the research agendas of the partnering research bodies.

Ten partners will start a research facility or 'Science Shop' to conduct research with CSOs. Once the results of the requested research become available, they will be delivered at the next phase of the project, highlighting the fact that CSOs do have an influence on research agendas.

Towards professional SIS communities

Project title: Platform of Local Authorities and Cities Engaged in Science (PLACES)

EU funding total: EUR 5 million

The PLACES project will mobilise a wide range of science establishments, cities and regions to form new communities of professionals engaged in SIS activities. The partners intend to broker ties between cultural, governmental and scientific actors at local levels. Several dozen 'City Partnerships' will be established, allowing local authorities and science museums to collaborate on draft action plans and on new activities to foster the development of Cities of Scientific Culture. The knowledge generated by the project will also feed recommendations on policy building for the Cities of Scientific Culture concept.

Gender guidelines and action plans

Project title: Increasing Capacity for Implementing Gender Action Plans in Science (GenSET)

EU funding total: EUR 1 million

Some 100 European science stakeholder institutions, 15 international gender experts, and 8 European strategic decision-makers will work together under GenSET to boost women's participation in science. The project aims to develop practical ways in which gender knowledge and gender mainstreaming expertise can be incorporated within European science institutions. One way will be to facilitate a sustainable, collaborative dialogue between gender experts and science leaders to agree on practical guidelines for implementing gender action plans within existing institutional mechanisms.

Innovation in the classroom

Project title: Large Scale Dissemination of Inquiry Based Science and Mathematics Education (FIBONACCI)

EU funding total: EUR 4.8 million

A total of 24 partners from 21 countries have committed to the objective of moving from deductive to inquiry-based methods in primary and secondary schools. Under the FIBONACCI project, 12 experienced 'Reference Centres' (selected for their large school coverage and capacity for inquiry-based methodologies transfer) will be partnered with 24 less-experienced 'Twin Centres'. Once the latter are equipped to start inquiry activities in schools, they in turn will train and tutor a new set of Twin Centres, resulting in the ongoing dissemination of the method.

Gauging reactions to the nano code of conduct

Project title: Code of Conduct for Responsible Nanosciences and Nanotechnologies Research (NANOCODE)

EU funding total: EUR 1.2 million

The safe, ethical and efficient progress of nanoscience and nanotechnology (N&N) research is the goal behind the recommendation on the code of conduct for responsible nanosciences and nanotechnologies research adopted by the European Commission in February 2007. The NANOCODE project aims to define and develop a framework that will allow the code to be integrated and implemented successfully at European level and beyond. The partners will consult with stakeholders to explore knowledge, attitudes, reactions and proposals relating to the code. The outcomes will support the European Commission, EU policy-makers and stakeholders in the implementation of the European Code of Conduct as well as help the European Commission to prepare the second Code of Conduct review (beginning in 2012).



To apply for a grant under the Science in Society Programme or to access previous calls for proposals, use the 'Find a call' tab at http://cordis.europa.eu/fp7/home_en.html on the CORDIS website.

SIS: TOWARDS A NEW APPROACH

The 'Vision of 2020 of the European Research Area', (ERA), adopted by the Council in December 2008, underlines that the ERA is firmly rooted in society and responsive to its needs and ambitions. The Science in Society (SIS) Programme aims to promote research's engagement with society and vice versa, whether by mobilising stakeholders for new partnerships, encouraging two-way dialogue between researchers and other stakeholders, promoting an 'ERA of ethics' or by providing better access to research results. In 2009, the focus had been on developing larger-scale actions involving a wide range of different actors that work together on key SIS issues.

The SIS Programme also supports new ways to interest young people in science and in research careers, and promotes equality between men and women in research. It strengthens the public profile of science and the ERA by promoting innovative ways to communicate and debate on scientific issues with the general public.

A total of 118 SIS projects were financed under the Sixth Framework Programme (FP6). Under its successor, the Seventh Framework Programme (FP7), the SIS Programme has so far financed 78 projects with a Commission contribution of EUR 62 million. In total, EUR 330 million is available under FP7 (2007-2013).

ERA's societal dimension can be enhanced by creating opportunities for citizens and other groups in society to appropriate relevant knowledge, and for scientists to draw closer to citizens' concerns. Until now, actions on public engagement and communication under the SIS Programme have focused mainly on capacity building and mobilising key actors beyond the research community to engage not only in research findings but also in issues for future research.

Mobilisation and Mutual Learning actions

A major new development in this regard under the 2010 Work Programme is the launch of longer-term Mobilisation and Mutual Learning actions (MMLs). The effective involvement and engagement of society in tackling the many challenges being faced requires mechanisms that facilitate cooperation between a diverse range of actors with different types of knowledge.

MMLs are designed to bring together actors from research and the wider community (e.g. civil society organisations, ministries, policy-making, science festivals and the media). They will collaborate on action plans that will connect research activities for a chosen Societal Challenge. These plans will encompass a series of SIS actions, such as public engagement, investigating ethics and governance, two-way communication, women in science, and science education. The emphasis will be on mobilising all relevant actors and on mutual learning in order to pool experiences and better focus their respective efforts on finding solutions that develop and use scientific and technological knowledge in the public interest.

This new initiative builds on earlier, smaller-scale actions in FP6 and FP7. Previously, the focus had been on building the capacities of various actors, in particular mediators between scientists and the public (e.g. science journalists and non-governmental organisations). Some projects were also successful in creating real engagement and two-way dialogue between researchers and the public, notably Meeting of Minds (European Citizens' Deliberation on Brain Science), while the Goverscience seminars provided a forum to debate the best way to take this issue forward. It became clear that many research organisations needed ideas and encouragement to help them work with citizens and other types of organisations to enrich their research strategies and systems by taking account of societal concerns.

The 2009 Work Programme paved the way for MMLs with the topic 'Structuring Public Engagement in Research', and (to some extent) also with the topic 'Platform of Networks Grouping Science Museums, Organisers of Science Events and the Cities'. The MML Action Plans are broader in scope and participation and may combine various SIS activities.

In addition to MMLs, the Science, Economy and Society Directorate has also developed the MASIS (Monitoring Research and Policy Activities of Science in Society) initiative, which aims to increase the visibility of SIS activities, and therefore their impact on European policy-making and society at large. More information on MASIS is available elsewhere in this publication.

National Contact Points (NCPs) are available in all EU Member States and associated countries to help guide you through the 2010 SIS Work Programme and the application process. A list of NCPs is available at http://cordis.europa.eu/fp7/ssh/ncp_en.html

SUPPORT TO THE EUROPEAN RESEARCH AREA – MASIS

The Monitoring Research and Policy Activities of Science in Society (MASIS) initiative is a major undertaking of the Science in Society (SIS) Programme. Its aim is to map, steer and monitor the SIS landscape in the European Research Area (ERA) so that EU citizens and society can benefit the most from SIS efforts.

In late 2008, the Council of Ministers of the European Union announced a bold target for the coming decade: free circulation of researchers, knowledge and technology across EU borders. Known as the 'Vision of 2020 of the European Research Area', it defines the road ahead for the ERA, a concept that was first presented in 2000 and set the scene for European research excellence. The accompanying statement to the vision for 2020 reads: 'The European Research Area is firmly rooted in society and responsive to its needs and ambitions in pursuit of sustainable development'. Science and technology, it explains, have a key role to play in responding to the needs of citizens and businesses, and the ERA aims to build on trust and dialogue between the science and society communities. The SIS Work Programme, therefore, has an important function to perform in implementing this vision.

What is MASIS?

Launched in June 2008, the ultimate objective of MASIS is to inspire greater synchronicity between the needs of society (particularly in light of the constant stream of changes Europe is undergoing) and science's response to these challenges, by emphasising European cooperation in SIS research.

To achieve this, a high-level group of experts was given the task of examining the role of SIS by analysing trends and challenges across Europe, within both EU Member States and associated countries. The role of the experts was to inform relevant policy-making and all other stakeholders of their findings and recommendations, increase the visibility of their activities in different parts of the EU, and increase the impact of these activities in European policy and society.

Towards a European model

In 2009, the MASIS experts released a report that provides an overview of the SIS landscape in Europe and ideas for the way forward. The publication, *Challenging Futures of Science in Society: Emerging Trends and Cutting-edge Issues*, is arranged into seven chapters, as follows.

1. Mandate of the Expert Group – a statement that positions the aims of the MASIS experts.
2. Place of Science in Society – the backdrop to issues discussed in the report.
3. Social Actors – an analysis of SIS stakeholders and their motivations.
4. Governance – a call for dynamic governance that embraces emerging forms of governance.
5. Strengthening Potential – the need to address 'deeper' human resources issues.
6. Communication – an overview of the ways to raise awareness of science (taking into account cultural diversity), and the challenge of developing 'transaction modes' of science communication.
7. European model – the possibility that trends, experiments and mutual learning can lead to a model for European SIS.

The experts conclude that a European Model of Science in Society 'may be emerging, even if much diversity remains'. EU programmes on SIS, they add, can draw on this and support further development and a leading European presence globally.

The next phase

The MASIS service contract, awarded to COWI A/S from Denmark, will provide a system to map and follow the developments of the most important SIS activities at national and European levels with the aim to: (1) inform relevant policy-making and all other stakeholders, (2) increase the visibility of such activities in different parts of Europe, and (3) increase their impact in European policy and society. MASIS will launch information-gathering measures with the help of a network of national correspondents. It will also build on existing national, regional and European resources by enhancing their European dimension.

The contractor will prepare a template for gathering/displaying information, organise the network of national correspondents, draw national reports, and create and maintain an online system. The EU Member States and associated countries will have the opportunity to comment on the draft templates. They will also designate experts or institutions with a good overview and authority on SIS issues to validate the national reports prepared by the correspondents. The contract is expected to provide services to Europe's research policy-making for the years to come, over and beyond the duration of the contract.

The overall results of the MASIS system will be disseminated and debated at a large stakeholder conference to be held in 2011. The expert group and the contractor will both be involved in setting the conference agenda.



'Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.' (Article 27 of the Universal Declaration of Human Rights).

A copy of the 2009 MASIS report, *Challenging Futures of Science in Society*, is available from the SIS website (<http://ec.europa.eu/research/science-society>).

OPEN ACCESS

In 2009, the European Commission's work on Open Access focused on activities at the EU Member State level. A pan-European survey of national Open Access activities revealed a growing number of national Open Access initiatives run by a variety of bodies. While this is encouraging, there are still very few coherent, nationally coordinated strategies. Member States also need to cooperate more with each other on the matter. The issue of Open Access to scientific data (and not just published, peer-reviewed papers) also needs to be addressed.

'Open Access' is the practice of granting free access over the Internet to research articles resulting from publicly funded research. As all research and innovation builds on earlier achievements, an efficient system for broad dissemination of and access to research publications and raw data can accelerate scientific progress. In turn, this is essential for Europe's ability to innovate, to enhance its economic performance and improve its capacity to compete through knowledge. Open Access can boost the visibility of European research, give researchers access to a wider body of research that can be built upon for future developments, and offer small and medium-sized enterprises (SMEs) access to the latest research for exploitation (helping to speed up commercialisation and innovation).

In 2008, the European Commission concentrated its efforts on the launch of the Open Access Pilot in FP7 (Seventh Framework Programme), under which some grant recipients will be expected to ensure that peer-reviewed articles arising from their research will be publicly available either 6 or 12 months after publication.

In 2009, the Commission focused on the EU Member State level. Back in 2007, EU research ministers had invited Member States to 'reinforce national strategies and structures for access to and preservation and dissemination of scientific information' and 'enhance the co-ordination between Member States, large research institutions and funding bodies'. The Council asked the Commission to monitor progress in this area and support coordination between countries.

Accordingly, in December 2008, the Commission sent out a questionnaire on Open Access to the members and observers of CREST (the Scientific and Technical Research Committee). The results were presented to this advisory body in June 2009.

Strengths and weaknesses identified

In all, 30 countries responded to the survey (25 EU Member States and 5 non-EU countries that are, nevertheless, involved in the EU's research programmes). The survey revealed many Open Access activities being run at national level across Europe. However, these tend to be coordinated by funding bodies, universities and libraries. 'To date, there are very few of the nationally coordinated strategies or policies called for in the 2007 Council Conclusions,' the report notes. In addition, policies on Open Access to research data are less developed than policies on access to peer-reviewed publications.

The questionnaire also found that there is a wide range of initiatives, many funded by the EU, designed to encourage Member States to coordinate their Open Access activities. However, the report cautions: 'While existing declarations and initiatives form a solid basis to build on, explicit common national funding body principles, for example on Open Access, are still missing.'

Countries should build on existing initiatives, the report recommends, adding that the European Commission could provide support for such activities.

Another important issue concerns the safeguarding of scientific information. 'More awareness is needed regarding the preservation of scientific information, articles and data in order to prevent a serious loss of scientific information in the long term,' the report reads.

Overall, respondents were favourable to European Commission activities regarding access to and the dissemination and preservation of digital scientific information. Areas where EU support was seen as particularly important include:

- encouraging cooperation between countries;
- supporting the development of a pan-European e-infrastructure;
- developing principles on access and dissemination for future EU-funded research;
- developing EU copyright rules for research;
- promoting access to scientific knowledge produced in developing countries.

Where to now?

The results of the survey were presented to a wider audience in Brussels in October 2009 at the European Research Area (ERA) conference 'Working Together to Strengthen Research in Europe'. Participants in the Open Access session described Open Access as 'a transformative principle in research communication that can improve the efficacy of the scientific effort in ERA and worldwide'.

However, they note that access to research will only lead to economic growth if functionalities are available that allow relevant material to be found and presented in useful ways. 'This kind of service is needed not only by the research community, but also by stakeholders in industry, especially SMEs [small and medium-sized enterprises], which build upon the results of scientific research,' they state.

Another recommendation reads: 'Coordinate the development by Member States of facilities to store and preserve outputs, including complex objects, at a decomposed level, enabling future generations of scientists to access and re-use individual components of the outputs.'

Participants also called for action to establish financial mechanisms to facilitate Open Access publication. At the EU level, an element of funding in each grant could be earmarked for activities relating to the preservation of data.

The first results of the Open Access Pilot in FP7, the outcomes of the CREST questionnaire and the discussions at the ERA conference represent important inputs into the Commission's deliberations on the next steps needed to enhance access to research data and results at both European and national levels.

ETHICS REVIEW

When applying for funding under the Seventh Framework Programme (FP7), researchers must identify ethical issues inherent in their research and explain how these will be addressed. Project proposals that touch on sensitive issues are subjected to a stringent process known as the Ethics Review. In 2009, the Governance and Ethics Unit of the Science, Economy and Society Directorate launched a number of initiatives designed to improve this process and make addressing ethical issues easier for researchers, reviewers and European Commission staff alike.

During the Ethics Review, a panel of experts in ethics and other disciplines (such as law, philosophy, information technology, medicine, molecular biology and veterinary science) judge whether a project proposal has correctly identified and addressed all relevant ethical issues.

Although the EU's Ethics Review is among the strictest in the world, the European Commission emphasises that the review process is not a 'policing action'. Rather, it has an educational and advisory function, with the aim being to identify ethics issues before they turn into ethics problems.

To guide researchers through the process, the Ethics Sector in the Directorate-General for Research runs regular information days and workshops explaining the FP7's ethics framework. Researchers can also consult the Ethics Help Desk.

New and improved

In 2009, the updated Ethics Review process was trialled in certain units. Under the new process, all proposals dealing with human embryonic stem cells, non-human primates and interventions on humans are automatically sent for Ethics Review. A screening exercise identifies other projects that need an Ethics Review. Proposals that fall under EU legislation (e.g. the Clinical Trials Directive or the Data Protection Directive) are reviewed by the relevant national authorities and the local ethics committees.

Another pilot exercise saw the preparation of the methodology needed for the planned ethics follow-up and audit. In 2010 and 2011, some 10 % of projects that had previously gone through Ethics Review will undergo an ethics follow-up.

Commission staff training

In December 2009, the first dedicated Ethics Review training course was held. Designed for all Commission staff dealing with applications for research funding, the half-day course aimed to improve participants' understanding of ethical issues and train staff to apply them systematically and consistently in their jobs. The course, which was presented by ethics review experts and Ethics Sector staff, covered informed consent, intervention on humans, data protection and privacy, research on animals, and research involving developing countries.



Ethical guidance

The year 2009 saw the production of guidance notes on the ethical aspects of research involving developing countries, and data protection and privacy.

Developing countries

Many ethical issues involving research in developing countries arise from the potential vulnerability of the local people. According to the guidance note 'Ethics in research and international cooperation', research involving developing countries or countries with emerging economies must:

- be responsive to local needs (i.e. the study must be beneficial to the health and welfare of study participants, their community and/or their country);
- be scientifically sound;
- comply with relevant EU and national legislation as well as international guidelines.

Data protection and privacy

Privacy issues can arise from the use in research of health-related records (including genetic material), criminal records, tracking records, ethnic, religious, political, dietary or sexual lifestyle information, and of individual or collective behaviour studies. The 'Data protection and privacy ethical guidelines' set out 10 questions that applicants should answer, covering the collection, storage, processing, accessing and transfer of data. The document also gives practical advice on how to address privacy and data issues, while a glossary explains common privacy- and data-related jargon.

More information on Ethics Review or to ask for Help Desk assistance, visit http://cordis.europa.eu/fp7/get-support_en.html

REPORT OF THE EXPERT GROUP ON THE GLOBAL GOVERNANCE OF SCIENCE

Who should have a say in the way science is governed at the global level? What is 'responsible research'? Does 'informed consent' mean the same thing everywhere? These are just some of the questions tackled in a report released in 2009 by the Expert Group on the Global Governance of Science. They argue that the EU is perfectly placed to take a lead on this, by sharing with the rest of the world its own aspirations and experience of science governance in the European Research Area (ERA).

According to the Expert Group, 'The construction of systems for the global governance of science is vital if science is to realise its potential and contribute to the solution of global problems.' The aim of their report is to develop a vision of global governance for the common good that mirrors European principles of good governance and fundamental rights.

The experts believe that the European Union is ideally placed to encourage critical reflection and undertake practical leadership in relation to the global governance of science and innovation. This is due to the fact that it is a political entity situated between national and global levels, upholds principles of good governance, has a charter of fundamental rights, and is committed to achieving the ERA.

The recommendations made by the group are addressed not only to policy-makers in the European Commission and EU Member States but equally to those organisations worldwide operating within and around science.

Expert consultation

The European Commission's Directorate-General for Research assigned the writing of the report. Contributors include legal scholars, sociologists, philosophers and political scientists from Europe, China, South Africa and the US. The group presented and discussed the report at a meeting in Riga, Latvia on 16 March 2009 with members of the Reflection Group on the Future of the EU.

The European Commission also secured a discussion with representatives from UNESCO and the Academy of the Sciences for the Developing World (TWAS), institutions that may provide follow up to the report. The event was co-organised and sponsored by the European Commission, the Nordic Council, Latvia's Ministry of Foreign Affairs and the University of Latvia.

Towards a vision of global governance

The report assesses options for the governance of science, and looks at how scientists have attempted self-regulation over the years. In addition, it charts the rise of public participation in and governance of science.

'The building of systems for global governance cannot be immediate. The process is necessarily evolutionary, involving aspects of social learning, exchange and experimentation,' the Expert Group writes. 'We cannot expect change overnight, but our hope is that this report helps to clarify the necessary direction in which global governance must travel!'

In a series of six recommendations, the authors urge the scientific community to promote ethical governance practices through grant requirements, educational programmes, research projects, events and other means. They also encourage scientists to be more self-critical, and to reflect more on the ends of their research, and not just on the means.

Furthermore, all scientists should adopt Open Access publication protocols to make the results of their research as widely available as possible. 'Open access is most likely able to enhance wide reflection ... [and] further benefit the sharing of science and scientific collaborations between developed and developing,' the experts state.

The experts note that the ERA could serve as a useful laboratory for the global governance of science. With this in mind, they recommend that all ERA research projects bear in mind the basic fundamental rights of dignity, freedom, equality, solidarity, citizen's rights and justice, while also learning from non-European societies and cultures.

The final recommendation sets out the experts' belief that the EU should extend to the global level its leadership in working to harmonise the governance of science across national boundaries.



Expert Group on the Global Governance of Science: Žaneta Ozoliņa (Chairwoman), Carl Mitcham and Jack Stilgoe (Rapporteurs), and Pamela Andanda, Matthias Kaiser, Linda Nielsen, Nico Stehr, and Ren-Zong Qiu (Members).

A copy of the report is available from the SIS website at <http://ec.europa.eu/research/science-society>

SCIENTIX – THE COMMUNITY FOR SCIENCE EDUCATION IN EUROPE

Knowledge generated in the area of science education can take on the form of practical experience, know-how and techniques rather than research results. As a consequence, this body of information tends to reside with those directly concerned and often does not get the kind of broad exposure that would prove fruitful to other stakeholders. In January 2009, the Science in Society (SIS) Work Programme published a tender asking for interested parties to develop a user-friendly Internet-based Information Platform on Science Education. Work is scheduled to start on the website early in 2010, with a fully functional, online platform expected to be operational by mid-year.

Although dissemination activities are a condition for receiving European Commission funding, the impact of these activities often suffers from a lack of economies of scope and scale and tends to be limited to the duration of the funded activity itself.

Furthermore, end users are almost always called upon to teach science in the local or national language. Unless each funded project foresees translation and adaptation in all of the official languages of the European Union, the use of the material generated can be not fully exploited. Indeed, individual projects rarely cover a representative selection of EU languages and might arguably have poor knowledge of any specific adaptation required or local conditions in each of the various national settings across Europe.

The EUN Partnership AISBL Brussels has been selected to establish the Internet-based Information Platform on Science Education which will be called SCIENTIX and perform the related services aimed at helping the science education communities in EU Member States and countries associated to the Seventh Framework Programme (FP7).

The purpose of the platform is to provide greater access to information and generate best practice regarding inquiry-based teaching methods that have been developed under calls for proposals (i.e. via the Framework Programme) and through other initiatives and activities. In particular, it will provide the following online and off-line services.

- The platform will support the regular dissemination and sharing of progress, know-how, and best practices in the field of science education. The sections proposed include projects and activities, teaching materials/best practices, events, news, forums, online chat and social networking facilities, a library, signposting for non-hosted Internet material, a monthly newsletter and feedback facilities.
- The portal structure and most of the related content will be available in six languages (i.e. English, French, German, Italian, Polish and Spanish). Teaching materials used by teachers and pupils will be translated (upon request) into one of the 23 EU languages.
- A European conference will be hosted (scheduled for 2011) inviting all participants of FP6- and FP7-funded projects, science education specialists, end users, stakeholders and other interested parties to raise awareness of the platform, promote networking and exchanges, and provide feedback on the services offered.
- Specific measures will be put in place to ensure visibility and awareness of both the platform and the conference among the targeted community in EU Member States and countries associated to FP7. These measures will include workshops, publications, and a proactive dissemination strategy (ways in which all stakeholders can be involved in this new community).

The contract with EUN Partnership AISBL Brussels will run for three years. More information on the launch of the new platform in 2010 will be available from the SIS Programme website.



META-ANALYSIS OF GENDER AND SCIENCE RESEARCH

Women are underrepresented in many fields and professions of science. Redressing the gender imbalance has attracted considerable interest in recent years, including financial backing in support of specific initiatives and research into the issue. The Science in Society (SIS) Work Programme has funded a project that will produce a concise and comprehensive database on gender-related research conducted over a 28-year period in 33 European countries. The project, which was established via a call for tenders process, will have its final conference in October 2010.

More than 50 experts from all EU Member States and associated countries are involved in the effort, which is headed by the Center for European Initiatives and Research in the Mediterranean (CIREM Foundation). These experts will both collect and analyse gender and science research (via the literature) produced in all European languages from 1980 to 2008.

The aim of the project is to provide a thorough analysis across European, national and regional levels, make the results accessible to stakeholders (e.g. through reports and bibliography), and inform future policy-making and research priorities under FP7 (e.g. through good practice examples and gap analyses).

Three-tier meta-analysis

The project has been divided into three thematic categories, as follows.

1. Horizontal segregation in research careers, for example:
 - choice of scientific subjects by girls and occupational choices by women;
 - perception and attractiveness of science, engineering and technology;
 - causes underlying these choices (e.g. stereotypes, influence of family and role models);
 - causes of success and failure at university level.
2. Vertical segregation in research careers, for example:
 - barriers for women in reaching top scientific positions ('glass ceiling' or 'sticky floor');
 - mentoring/tutoring initiatives.

3. The underlying causes and effects of this horizontal and vertical segregation, for example:

- work-life balance issues;
- pay gap;
- mobility-related obstacles;
- evidence of discrimination;
- working culture.

Reports and database

Social scientists from each EU Member State and associated country are responsible for preparing a bibliography on gender and science research in their country, and writing a report outlining results of the bibliographical search and identifying research gaps. These reports will then inform a final, synthesis report, which will be delivered in October 2010.

The Gender and Science Database (GSD) will contain an informed bibliography (e.g. journals, articles and books) of all research carried out on gender and research in every country. Its aim is to provide researchers and policy-makers with a range of information to suit their purposes, such as an analysis concerning a specific issue. The database will contain bibliographical references, abstracts, thematic areas and methodological references. The GSD will be completed in March 2010.

Some reports and GSD entries are currently available on the project's dedicated website. Papers and articles produced in languages other than English will be summarised and made available in English (<http://www.genderandscience.org/>).

SHAPING COLLABORATION BETWEEN RESEARCH AND CIVIL SOCIETY ORGANISATIONS

Research organisations (ROs) and civil society organisations (CSOs) can both benefit a great deal from working together. In practice, however, the two groups rarely embark on joint projects. The 2009 Goverscience-CSOs report explains how the Seventh Framework Programme (FP7) helps to address this issue, and sets out recommendations for productive RO-CSO partnerships.

CSOs are responsible for articulating the opinions of various sectors of society. They include environmental groups, minority groups, consumer representatives and patient organisations, to name just a few. As such, a good deal of scientific research is extremely relevant to their interests.

For instance, environmental groups are keen to follow the latest scientific advances in our understanding of climate change, while groups representing those suffering from heart disease want to keep abreast of current research on causes of and possible treatments for the condition. In addition, CSOs have valuable expertise and often enjoy close links with the people most likely to benefit from research. For their part, most researchers want the knowledge they generate to benefit society in some way, and CSOs can help make this happen.

Different worlds

However, CSOs and ROs tend to inhabit different worlds, and there are a number of factors that hinder closer collaboration between the two. For example, before work can begin, both parties need to get to know each other's jargon, culture and expectations.

For too many ROs, engaging with CSOs and the wider public is viewed as an 'extracurricular activity', and researchers are not always rewarded for such work. Furthermore, application forms for research funding are configured for ROs, and are not really suited for the kind of contributions CSOs make to projects.

Sharing experience, generating ideas

In October 2008, representatives of joint RO-CSO research projects came together at a seminar in Brussels, Belgium to discuss the dynamics of their partnerships, share experiences and come up with suggestions for future activities. The resulting proceedings, published in 2009 under the title of *Goverscience CSOs Seminar*, provide insight into RO-CSO partnerships and give examples of successful EU-funded projects in this area.

The Science in Society (SIS) Work Programme under FP7 developed a number of schemes specifically designed to unite CSOs and ROs in joint projects across the various FP7 domains. Some of these schemes, and projects that represent inspiring case studies, are highlighted below.

CSO capacity building

These projects support preparatory activities for CSOs that are planning further participation in research. Eligible activities include assessing research findings, identifying research topics, and exploring different forms of cooperation with ROs.

Case study: European Research Agendas for Disability Equality (EuRADE)

The aim of the EuRADE project was to provide CSOs representing disabled people with the knowledge and skills needed to participate in FP7 and other research programmes. EuRADE enabled these representative groups to learn about research methods and forge links with researchers. Together, the ROs and CSOs in the project elaborated on research agendas which involve disabled people and take on board disability issues.

More information: <http://www.eurade.eu/>

Cooperative research processes

This scheme fosters partnerships between researchers and non-researchers (including CSOs) on issues of common interest with a view to coming up with concrete solutions in a spirit of mutual learning.

Case study: Co-operative Research on Environmental Problems in Europe (CRÉPE)

Under the CRÉPE banner, CSOs and ROs are working together on agri-environmental issues. In doing so, they are designing and testing different methods of RO-CSO collaboration and working to strengthen the capacity of CSO involvement in research. The project also aims to bring research more closely in line with society's needs, and put forward alternative solutions based on different understandings of societal problems, agri-environment issues and sustainable development.

More information: <http://crepeweb.net/>

Funding scheme for the Benefit of Specific Groups – BSG-CSO

This scheme supports joint RO-CSO research projects, and places a strong emphasis on training and outreach strategy. The BSG-CSO scheme can be used in any area of FP7.

Case study: International Civil Society Forum on Conflicts (INFOCON)

INFOCON arose from discussions between researchers and CSOs working in the fields of minority rights and conflict resolution. Among other things, the project partners will develop a common understanding of sources of conflicts. They also plan to make policy recommendations at European, national and local levels with a view to improving conflict policies and using the leverage and opportunities that CSOs offer in the areas of conflict and peace.

More information: <http://www.infocon-project.org/>

What makes for a successful RO-CSO partnership?

The publication also sets out the following recommendations that can encourage more and better RO-CSO partnerships at local, national and European levels:

- set up bridging facilities where CSOs, ROs and other groups can meet and share knowledge and experience;
- provide researchers with incentives to work with CSOs;
- ensure that the rules of research funding schemes take RO-CSO partnerships into account;
- open doors in research programmes (e.g. make more funding available to CSOs);
- make the most of CSO-RO project outcomes (e.g. broaden evaluation systems to encompass public participation and social innovation).

Introducing ALAC

In addition to the Goverscience-CSOs report, in 2009, work begun on the ALACs (Advocacy and Legal Advice Centres) project funded under FP7's Socio-economic Sciences and Humanities Work Programme. The three-year project brings together CSO Transparency International (and some of its national branches) and three research institutes. The team will draw on the work of Transparency International's ALACs, to enhance civil society participation, improve anti-corruption effectiveness, and develop the advocacy for legal change at national and EU levels.



In the foreword to this publication (available from the SIS website), Director of the Science, Economy and Society Directorate Jean-Michel Baer, explains: 'All of us as citizens have to have a better grasp on what is at stake, how to adapt our way of life ... and, then with a renewed appreciation of the situation, can we consider what technology will be needed to respond to these challenges.'

SIS PROJECTS – EXAMPLES

The Science in Society (SIS) theme was first established by the European Commission under the Sixth Framework Programme (FP6). Today, the SIS Programme continues to fund a range of projects and initiatives in support of its vision to create an environment where the public is more aware and enthusiastic about science, and one where scientific effort is driven by the concerns and aspirations of an informed public. The projects below represent a snapshot of the many and varied SIS research activities supported under FP6 and its successor, the Seventh Framework Programme (FP7).

Project acronym: EFORTT

Project title: Ethical Frameworks for Telecare Technologies for Older People at Home

Coordinator: Lancaster University (United Kingdom)

Funded under: FP7–SIS

EU funding total: EUR 783 084

Website: <http://www.lancs.ac.uk/efortt>

What are the implications of remote care technologies that could be worn by, installed or embedded in the homes of older people? The aim of EFORTT is to address ethical and democratic concerns that have arisen as a result of research and development (R&D) results being applied in advanced care technologies. Some of these R&D efforts have not adequately addressed the implications of the technologies in a social context, an issue that this project intends to explore.

EFORTT will develop approaches to understand the making of practice around telecare (providing equipment and services for vulnerable people using technology) in both preventive and responsive modes. It will also contribute to the making of remote care policy at European level by recruiting panels of older people and carers in each region represented by the project partners. By convening these panels twice (early in the project to gain citizen views, and later to review the project's findings), the study will develop a grounded framework to enhance the legitimacy of European policy-making in this highly sensitive area.

In 2009, EFORTT representatives participated in the Ambient Assisted Living forum titled 'Innovative Solutions for Older Persons – A New Understanding'.

EFORTT will host an international conference in Barcelona, Spain, in September 2010 titled 'Ageing with technologies: a participative conference on care in Europe!'. The project's final report will be submitted in 2011.

Project acronym: INNOVA-P2

Project title: Pharma-innovation – patent-2

Coordinator: University of Central Lancashire (United Kingdom)

Funded under: FP7–SIS

EU funding total: EUR 728 640

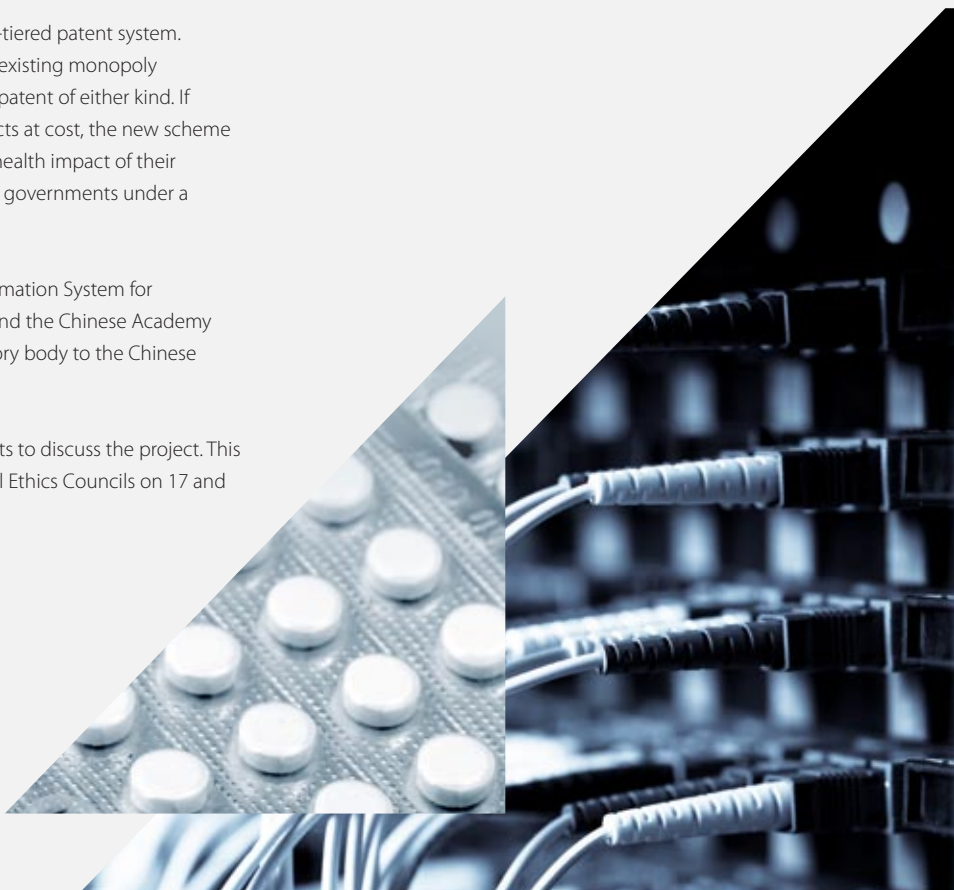
Website: <http://www.uclan.ac.uk/innova>

INNOVA-P2 aims to develop a plan for amending the current intellectual property rights (IPR) system for rewarding pharmaceutical innovations. The need to improve the system has become obvious in the wake of public health emergencies such as the AIDS crisis, where pharmaceutical companies recoup their investments in research and development (R&D) from low-income patients with fundamental drug and treatment requirements.

The consortium intends to advance a potential two-tiered patent system. Known as 'Patent-2', it would be complementary to existing monopoly patents, and give innovators the ability to choose a patent of either kind. If pharmaceutical innovators agree to sell their products at cost, the new scheme would offer a supplementary reward based on the health impact of their products. The rewards would be financed mainly by governments under a proposed 'Health Impact Fund'.

Project collaborators include the Research and Information System for Developing Countries, a leading Indian think tank, and the Chinese Academy of Science and Technology for Development (advisory body to the Chinese Ministry of Science on IPR issues).

In 2009, the coordinator was invited to various events to discuss the project. This included participation at the 14th Forum of National Ethics Councils on 17 and 18 September in Stockholm, Sweden.



Project acronym: CASC**Project title:** Cities and Science Communication: Innovative Approaches to Engaging the Public**Coordinator:** Birmingham City Council (United Kingdom)**Funded under:** FP7-SIS**EU funding total:** EUR 870 980**Website:** <http://www.eucasc.eu/>

Why is it important that people become more engaged in science? According to the CASC team, an engaged public can make informed choices about the way they live, participate in scientific debate, look critically at information and contribute more effectively to the knowledge economy.

CASC brings together 20 partners from Europe and China that are actively involved in the area of public engagement in science but are working in different social, cultural, economic and political contexts. The team aims to assess existing methods and approaches to building a scientific culture, their impact on specific target groups, and the likelihood that these techniques can be transferred between countries and cultures. Ultimately, the partners intend to devise and test potential new ways of increasing people's involvement with (and understanding of) science.

The project will develop policy recommendations for the European Commission, and for national, regional and sub-regional levels of governance.

Project acronym: ESConet**Project title:** European Science Communication Network**Coordinator:** University College London (United Kingdom)**Funded under:** FP7-SIS**EU funding total:** EUR 543 827**Website:** <http://www.esconet.org/>

The two-year ESConet project aims at training high-level EC-funded scientists in science communication skills in order to interact effectively and confidently with the mass media, use the Internet and its capabilities, and help engage European citizens in dialogue about Science in Society issues. The team builds on highly successful science communication training workshops and modules developed under FP6 and it raises the European dimension in such training.

A total of 10 science communication workshops were held in 2009, with a further 10 scheduled for 2010. These workshops mainly target scientists and researchers involved in projects and networks funded under the Sixth and Seventh Framework Programmes (FP6 and FP7 respectively).

Project acronym: PSx2

Project title: Participatory Science and Scientific Participation: The Role of Civil Society Organisations in Decision Making about Novel Developments in Biotechnologies

Coordinator: Consiglio dei Diritti Genetici (Italy)

Funded under: FP6–SIS

EU funding total: EUR 434 332

Website: <http://www.fondazioneirittigenetici.org/psx2/psx2>

'CSOs [civil society organisations] do not wish to block science and innovation. The majority of them actually call for a closer cooperation with scientific and industrial actors, right from the very beginning of the innovation process.' This is one of the key messages from the survey that PSx2 conducted on European CSO activity. Over 100 representatives of various CSOs (e.g. environmentalist organisations, farmer unions, church organisations and organisations working for social justice) took part in this survey.

In the final report, the authors add that although such a process would slow down the pace initially, it would provide all stakeholders with the opportunity to build trust, and could even enhance an innovation's commercial success.

PSx2 provided five CSOs and four academic partners with a platform to engage in dialogue (through listening and mutual learning) on scientific and technological developments, with particular reference to agricultural biotechnology (a field that could benefit from more active citizen participation). The outcome of the project, according to the team, was as much about CSO participation *in* science as it was an experiment of participation in science *with* CSOs. The final report encompasses recommendations on when and how to involve CSOs in research activities.

Project acronym: S-TEAM

Project title: Science Teacher Education Advanced Methods

Coordinator: Norwegian University of Science and Technology (Norway)

Funded under: FP7–SIS

EU funding total: EUR 4 699 928

Website: <https://www.ntnu.no/wiki/display/steam/SCIENCE-TEACHER+EDUCATION+ADVANCED+METHODS>

The S-TEAM project, which started in May 2009, aims to disseminate inquiry-based science teaching (IBST) methods to the widest possible range of teachers and teacher educators across Europe and associated countries. It has three core aims: (1) to improve motivation, learning and student attitudes in European science education (and in doing so, to increase scientific literacy and recruitment to science-based careers); (2) to enable large numbers of teachers to adopt IBST and other proven methods; and (3) to support teachers by providing training in (and access to) innovative methods and research-based knowledge.

A total of 25 participants from 15 countries are involved in the project, which (beyond teachers and teacher educators) will include the participation of researchers, students, parents and policy-making to ensure that dissemination is effective. Activities will include workshops, training packages, video case-studies, teaching materials and publications.

Since July 2009, the project has been running its national workshop programme, gathering information on state of the art in IBST in the 15 consortium countries. Each national meeting comprises around 10 people, representatives of different stakeholder groups in the host country. There will be one meeting in each partner country, with a final meeting scheduled to take place in January 2010.

Project acronym: Mind the Gap

Project title: Learning, Teaching, Research and Policy in Inquiry-Based Science Education

Coordinator: University of Oslo (Norway)

Funded under: FP7-SIS

EU funding total: EUR 780 276

Website: <http://www.uv.uio.no/english/research/projects/mindingthegap/index.html>

There is a wealth of research and development being conducted in Europe in the area of inquiry-based science teaching (IBST). However, the knowledge is spread out and indistinct, and therefore is not utilised to its full potential by teachers and educators throughout Europe. The Mind the Gap project team argues that in order for science teaching to succeed in meeting the interests and concerns of young people, the following 'gaps' need to be examined and connected between:

- theory and practice;
- teaching and learning;
- research, policy and practice;
- educational policies and in-service training;
- instructional designs and preferable tools;
- cognitive demands and available tools;
- the culture of science and marginalised groups (including girls).

The Mind the Gap project, which ends in March 2010, held a project meeting in Bristol, UK, in February 2009. The project was also represented at several events and workshops in 2009, including the start-up meeting for the S-TEAM (Science Teacher Education Advanced Methods) project and the seminar, 'Teaching Professional Development', at Centre National de la Recherche Scientifique in May, and the European Science Education Research Association 2009 conference in September.



Project acronym: MOTIVATION**Project title:** Promoting Positive Images of SET in Young People**Coordinator:** Bergische Universität Wuppertal (Germany)**Funded under:** FP7-SIS**EU funding total:** EUR 499 888**Website:** <http://www.motivation-project.com/>

What factors go into making the areas of science, engineering and technology (SET) attractive study and career options for young men and women?

Unfortunately, adolescents often harbour outmoded and unattractive notions of what a professional life would be like in these fields. Are these images influenced by the media and socialisation agents, such as peers, teachers and job advisors?

The aim of the MOTIVATION project was to generate facts about these influences, and to develop measures for changing attitudes towards SET in young people. For example, through analyses, interviews and group discussions, the project team were able to gauge how gender roles in SET are represented on television and in magazines. Information of this type could generate good practice and dissemination measures that could contribute to a more positive image of SET.

The project culminated in a final international conference in December 2009 where three main topics were presented: (1) images of SET, youth and gender, (2) peers, school and media, and (3) methodology and evaluation of good practice. The conference was an opportunity to spark an exchange between representatives and researchers from both academic and non-academic fields.

Project acronym: WOMEN-CORE**Project title:** Women in Construction Scientific Research**Coordinator:** Fundación Labein (Spain)**Funded under:** FP6-SIS**EU funding total:** EUR 1 336 056.80**Website:** <http://www.women-core.org/web/index.php>

The construction sector is considered to be one of the most important sectors in terms of economic growth and employment. It is, however, the most male-dominated sector within industrial research as a whole. The overall objective of the WOMEN-CORE project was to develop knowledge on women scientists in construction research in Europe. More specifically, the consortium's focus was to:

- enhance knowledge of the current situation and the influence of women scientists in construction research;
- identify attractive research areas for women within the field;
- identify and assess the gender-specific needs of research and development (R&D) in the construction sector;
- explore new opportunities and anticipate tendencies for empowering women in construction research;
- provide recommendations for strengthening the role of women in construction research;
- disseminate results and establish a network of women scientists in construction.

Nine reports were generated during the project's lifespan (available from the project website). These reports include assessments of qualitative data on women in industrial and construction research, women's participation in construction patents, mentoring programmes, and networking experiences. Furthermore, a 13-page executive summary provides a concise view of the project's results.

The Equality Network for Construction Researchers in Europe (ENCORE) has been established as a result of WOMEN-CORE. The aim of the network is to expand on the role of women in the field, and is open to all construction-related researchers, including women and men, industry and academic supervisors.

SIS EVENTS – EXAMPLES

Seminars, workshops, conferences and other events are an important way for stakeholders in the Science in Society (SIS) area to exchange information, collaborate on ideas, and engage in future activities. These forums may be hosted by coordinators of projects funded under the SIS Work Programme, Directorate L, other Directorates within the Directorate-General for Research or by various stakeholders within the SIS field. Some of the events that took place in 2009 are documented below.

STACS Conference – 'Mainstreaming Societal Engagement in Research Issues' 3-4 March 2009, Brussels, Belgium

The objective of the STACS (Science, Technology and Civil Society – Civil Society Organisations, Actors in the European System of Research and Innovation) project was to build the capacity of civil society organisations (CSOs) to participate in research activities. The purpose of the conference was to present the project's main findings and recommendations.

The STACS report, *Participation of Civil Society Organisations in Research*, was one of the focal points of the event, which attracted some 60 participants from across Europe and beyond (including CSOs, researchers, professional organisations and policy-making).

The report analyses the benefits and limitations of innovative mechanisms that allow and fund research partnerships between researchers and CSOs:

- the Community-University Research Alliance (CURA) programme (set up in 1999 by the federal government of Canada);
- the Partnerships of Institutions and Citizens for Research and Innovation (PICRI) programme (running in the Ile-de-France region since 2005);
- the new FP7 funding scheme 'Research for the Benefit of Specific Groups – Civil Society Organisations', which is currently used in the fields of environment, social sciences and humanities.

It also lists several recommendations on how support to research partnerships between CSOs and researchers can be improved at regional, national and European level, involving universities, research institutions and CSOs. The report acknowledges that the support provided by the EU via the Science and Society Programme has been crucial, both in practical and symbolic terms, in developing these partnerships. It suggests, however, that more capacity building and training is necessary for actors involved at different levels, including staff of the Directorate-General for Research and of corresponding national public authorities.

More information: http://www.citizens-science.org/about_us/stacs_project

European RiskBridge Project Final Conference – 'Risk Governance and Policy Learning Within and Between Risk Fields'

26-27 March 2009, Brussels, Belgium

Funded under the Sixth Framework Programme (FP6), the objective of the RiskBridge (Building Robust, Integrative Interdisciplinary, Governance Models for Emerging and Existing Risks) project was to build 'bridges' between six different kinds of risk fields (e.g. stem cells, radioactive waste, nanotechnology, climate change, sediments, and electromagnetic fields), scientific disciplines, policy-making and science.

The project's final conference was organised by Innogen, the Economic and Social Research Council's centre for research on innovation in genomics. The purpose of the event was to disseminate RiskBridge's findings, and to generate discussion on both how an impact can be made in the areas of risk management and governance and what the ensuing steps should be.

Over 60 delegates participated in the two-day event, which was aimed at practitioners within the various risk fields, scientists and social scientists interested in general issues surrounding risk governance of complex technologies, and policy-making directly involved in risk management. Representatives from the commercial sector and relevant non-governmental organisations (NGOs) also participated in the conference.

The project's final conference proceedings and final report are available from its dedicated website. The final report (over 300 pages) provides recommendations on how to handle complex and emerging risks. RiskBridge heritage is maintained by the International Risk Governance Council (<http://www.irgc.org/>).

More information: <http://www.riskbridge.eu/>

NanoCap Project Final Conference – 'Working and Living with Nanotechnologies' 2 April 2009, Brussels, Belgium

It is not often that a project is able to attract the participation of trade unions (TUs) and non-governmental organisations (NGOs) from across Europe in order to identify areas of agreement on a given topic. And yet the NanoCap (Nanotechnology Capacity Building NGOs) project did just that.

It was established to improve stakeholder knowledge on the ethical aspects of nanotechnology, as well as the associated environmental, and occupational health and safety risks. The project consortium included five environmental NGOs, five TUs and five universities. Together, they held a series of focused, working conferences during the lifespan of the project, i.e. from 2006 to 2009. NanoCap allowed the participants to improve their understanding of this new field, formulate their positions (within their actual policy context and supported by scientific input), inform their members and the general public, and discuss the relevant issues.

As a result of the project, TUs and NGOs established their positions after discussions with their members. NanoCap has also developed recommendations to enable public authorities to address the health, safety and environmental risk issues related to the rapid introduction of nanotechnology into society.

NanoCap's final conference was hosted jointly with STOA (Scientific Technology Options Assessment) of the European Parliament. Both TU and NGO representatives had the opportunity to present their positions and perspectives on nanotechnologies to an audience of some 250 people at the European Parliament premises. The proceedings of the final conference and position statements are available from the project's dedicated website.

More information: <http://www.nanocap.eu/>



'Changing Research Landscapes to Make the Most of Human Potential: 10 years of EU Activities in 'Women and Science' and BEYOND'
14-15 May 2009, Prague, Czech Republic

Hosted in cooperation with the Czech Presidency of the European Union, the aim of the conference was to share best practice in attracting and keeping women (and men) in science and technology careers. The event also served as an occasion to review results from a decade of EU support for research in the area of women and science. Some 300 participants were given the opportunity to engage in the themes that follow, among others.

- Importance of top-level support for change: Member States should make more effort to mainstream gender in all their policies.
- Structural change is possible: experience in diversity management in the private sector has shown that change is both possible and beneficial.
- Crisis provides opportunities for change: an opportunity now exists for national governments and research institutions to make decisions that can also bring about the needed societal change.
- Women and men (and institutions) benefit from a balanced working life: case studies from industry demonstrate that a work-life balance is not only good for both sexes but also for the companies themselves.
- School science education plays an important role: science teaching needs not only to encourage more young people to choose careers in science and technology, but also to train science- and gender-aware citizens of the future.

The conference reaffirmed the message that without gender-awareness commitment from human resources departments at universities and other research institutions, a solution to the shortage of highly skilled people in the European Research Area (ERA) cannot be found. On the contrary, problems with attracting and keeping researchers will continue to increase.

More information: <http://ec.europa.eu/research/science-society>

Pollen Project Final Conference – 'New Milestones for Inquiry-based Science Education in Primary Schools in Europe'
29-30 May 2009, Berlin, Germany

The conference represented the final phase of the Pollen (Seed Cities for Science) project. The aim of Pollen was to promote inquiry-based science education (IBSE) by focusing on the creation of 12 EU 'seed cities' (territories that support primary science education by involving the whole community).

Hosted by the Berlin-Brandenburg Academy of Sciences and Humanities, the conference was an opportunity for some 20 speakers to generate discussion on four major themes:

1. IBSE as a key approach;
2. community participation and support for dissemination;
3. involvement of the scientific community;
4. science and cross-disciplinary teaching.

About 170 participants from 25 countries (Europe and beyond) took part in the event. Closing remarks were provided by three speakers, including Dr David Jasmin, project coordinator and head of La main à la pâte (France). Dr Jasmin noted that about 36 000 students and 2 400 teachers were involved in the project (figures also reveal that compared to the project's first year the number of teachers taking part in Pollen has increased fivefold and the number of pupils fourfold). Dr Jasmin also introduced Seed Cities for Science Education Charter, a publication that summarises the five 'pillars' that define the Pollen experience. Further details, including the charter, conference papers and presentations are available through the project's dedicated website.

More information: <http://www.pollen-europa.net/>



European Union Contest for Young Scientists

11-16 September 2009, Paris, France

The 2009 European Union Contest for Young Scientists (EUCYS) was organised by Sciences à l'Ecole and the French Atomic Energy Commission in collaboration with the European Commission's Directorate-General for Research. EUCYS is one of Europe's premier showcases for young scientific talent (aged between 14 and 20). It brings together winners of national science competitions from within the EU, associated countries and selected guest countries.

This year, which marked the 21st anniversary of the contest, EUCYS attracted 87 projects from 140 contestants from 38 countries. The three first prizes of EUR 7 000 each were awarded to Liam McCarthy and John D. O'Callaghan (Ireland) for 'The Development of a Convenient Test Method for Somatic Cell Count and its Importance in Milk Production'; Fabian Gafner (Switzerland) for 'Dikranos — the Airplane with Reverse Gear', and Aleksander Kubica and Wiktor Pilewski (Poland) for 'Spiral Zone Plates'.

Second and third prizes were awarded to projects from France, Germany, Hungary, Israel, Malta and Spain. In 2008, the European Commission launched a prize that highlights the importance of international scientific cooperation in research. This year, the prize was won by Peter Massey and Shaunak Bakshi (US) for 'Lipoic Acid: Towards a Novel Neuroprotective Treatment for Alzheimer's-Associated Cognitive Dysfunction in a Drosophila Model'.

More information: <http://www.eucys09.fr/>

Gender in Research as a Mark of Excellence

In 2009, work began on the development of training materials and a series of training sessions to help better integrate gender-related aspects into research under the Seventh Framework Programme (FP7) and beyond. Aimed at researchers, project applicants, National Contact Points (NCPs) and FP7 project consortium members, the practical 'toolkit' demonstrates how the gender dimension is addressed in all aspects of research.

The kit provides case studies drawn from nine research fields: (1) health, (2) food, agriculture and biotechnology, (3) nanosciences, nanotechnologies, materials and new production technologies, (4) energy, (5) environment, (6) transport, (7) socio-economic sciences and humanities, (8) science in society, and (9) specific activities of international cooperation.

The free, one-day training sessions, which began in September 2009, will run until December 2010. They combine knowledge-based activities with more experienced-based elements, and include practical exercises. More information on the toolkit and training sessions are available online (<http://www.yellowwindow.be/genderinresearch/index.html>). The website also provides links to reading material on gender-related issues in the nine fields.



Forums of National Ethics Councils (NEC Forum)

4-5 June 2009, Prague, Czech Republic

17-18 September 2009, Stockholm, Sweden

The NEC Forum is an independent, informal platform for exchange of information on ethics. It meets twice a year and is hosted by the National Ethics Council of the country that holds the EU Presidency at the time. In addition to encouraging the bioethics infrastructure in Europe, the network has developed an important role in exchanging good practices between EU Member States. At every meeting, the NEC Forum holds a joint session with the European Group on Ethics (EGE), an independent, pluralist and multidisciplinary body, which advises the president of the European Commission on issues of ethics and science.

Topics discussed at the 13th NEC Forum included neuroethics, genetic testing and biometrics. The 14th NEC Forum meeting was an opportunity to discuss issues related to synthetic biology, and the theme of 'justice in health and health care'. The presentations of these meetings can be downloaded from the public library of the NEC Forum (<http://europa.eu/sinapse/directaccess/NEC/Public-Library>).

NEC Forum meeting agendas and minutes are posted on the Science in Society (SIS) website under the 'Ethics' tab.

More information: <http://ec.europa.eu/research/science-society>



SIS PUBLICATIONS – EXAMPLES

The ability to access and share knowledge is among the goals of the Science in Society (SIS) Programme. The publications highlighted below are a selection of the numerous books, reports and journals supported each year, covering a range of subjects relevant to the SIS agenda. Links to the publications or to more information are available from the SIS Programme's website (<http://ec.europa.eu/research/science-society>).



Goverscience Seminar on Inclusive Risk Governance

In the foreword to this publication, Director of the Science, Economy and Society Directorate Jean-Michel Baer asks: What is a risk and who should decide if society as a whole should take it? He adds, 'Would we accept to have our body modified without our informed consent? Would we like our well-being built at the expense of part of the population, the developing world, animals or the biosphere as a whole and the generations to come?'

The report provides insight into some of the issues related to risk governance by exploring the work of relevant projects (past and present) supported by the European Commission. More specifically, it documents the proceedings of a seminar that took place on 4 and 5 December 2008, in which representatives of 11 EC-funded projects and 12 Commission personnel engaged in a series of themed sessions.

A consensus was reached by the participants with regard to inclusiveness (generally defined as the act of involving stakeholders and integrating their concerns into research). According to the participants, 'risks are socially constructed on the basis of scientific information through political judgment'. Some commonly accepted 'risk principles' include:

- clarity in choices;
- trust (i.e. distrust could lead to considerable loss);
- justification (i.e. need to justify an action that could lead to harm for people or assets);
- role of the experts (i.e. advise rather than make normative decisions about risks);
- participation (i.e. the extent to which social groups and their representatives are integrated into the process).

Governance Seminar on Energy and the Environment

The report is a summary of presentations, discussions and outcomes of a seminar held on 9 and 10 December 2008. Participants included representatives of projects funded by the European Commission under the Sixth and Seventh Framework Programmes related to the fields of energy, environment and governance. The seminar was an opportunity to discuss project findings and the main Community strategic documents relating to the field, with particular emphasis on gaining insight into the road ahead for sustainable consumption and production of energy.

The report is structured in three main chapters mirroring the flow of the seminar sessions: Chapter 1 details the outcomes of the stocktaking discussion; Chapter 2 documents the outcomes of the discussion on future perspectives; and Chapter 3 reflects on the seminar's closing discussion and recommendations.

Eight main recommendations are made in the report and documented in an additional fourth chapter. These recommendations target the goal of implementing existing knowledge and overcoming the gap between knowledge and action. One proposed initiative would record which EU Member States are successful or not in implementing concrete, actionable changes towards sustainable production and consumption.



Commission recommendation on 'A code of conduct for responsible nanosciences and nanotechnologies research' and Council conclusions on 'Responsible nanosciences and nanotechnologies' research

In 2007, the European Commission held a public consultation on nanosciences and nanotechnologies (N&N) research. This research carries enormous potential for improving human health, the environment and quality of life. However, it also has the potential to generate controversy and concern in relation to potential risks, ethics and the preservation of fundamental rights.

As a result of the consultation, the Commission on 7 February 2008 adopted a recommendation to EU Member States on a code of conduct for responsible N&N research. This recommendation was followed on 26 September 2008 by Council conclusions.

This publication, which was released in 2009, represents the culmination of these efforts, with both the code and conclusions documented together. In the foreword, the Director of the Science, Economy and Society Directorate, Jean-Michel Baer, highlights the importance of these milestones for N & N research: 'Considering the long and detailed preparatory work that led to defining the code of conduct, the wide scope of the initiative and the fact that it has been adopted by one of the economies investing most in nanotechnologies worldwide, the code of conduct can very likely be considered the most advanced existing model of regulation and governance of nanotechnologies!'



Public Engagement in Science – Report of the Science in Society Session of the European Conference on the Future of ERA

Science and technology affect all areas of our lives, but how do people relate to science and technology? And how do scientists view their relationship with the general public? Recent controversies over genetically modified organisms (GMOs), mobile phones and nuclear waste have brought these questions to the fore.

In 2007, a consultation on public engagement in science and research was carried out. In the same year, the Portuguese Presidency organised a conference in Lisbon on the Future of Science and Technology in Europe. The outcomes of the consultation and the discussions in Lisbon form the body of a new report on the subject.

The publication sets out four recommendations to improve the science-society relationship. Firstly, Europe should continue to develop its 'recipe for innovation', which combines scientific excellence with good governance and public engagement. Secondly, the contribution of lay knowledge to research should be acknowledged. Thirdly, researchers should be trained to engage with the general public. Finally, more systematic approaches to the issue should be explored.

'For public engagement to make a difference, it must become part of the routine practice of good science,' the report reads. 'We need to generate new approaches to governance ethics and public participation that can learn from past mistakes, cope more readily with complexity and uncertainty, and harness the drivers of scientific and technological progress for the common good.'

She Figures 2009: Statistics and Indicators on Gender Equality in Science

Published in 2003, 2006 and 2009, *She Figures* provides insight into the current employment situation of male and female scientists and researchers in Europe. Data is collected every three years by the Directorate-General for Research directly from EU Member States and associated countries (through a group of Statistical Correspondents), and from the Eurostat database.

Some of the main findings and trends from *She Figures 2009* are as follows:

- women accounted for 30 % of researchers in the EU in 2006;
- in the EU, their proportion is growing faster than that of men (6.3 % compared with 3.7 % for men);
- in EU Member States, 45 % of all PhD graduates were women in 2006;
- there continues to be a strong vertical segregation that marks the academic careers of women (e.g. women represent only 44 % of grade C academic staff, 36 % of grade B academic staff, and 18 % of grade A academic staff);
- the social sciences and humanities have the highest proportion of women as full professors (18 % and 27 %, respectively), and engineering and technology have the lowest (7.2 %).

She Figures 2009 shows that a rapid progression is bringing about a more equal representation of men and women in both academic disciplines and at the start of academic careers. However, strong segregation patterns continue marking both the highest step of academic careers and also research in the private sector. Proactive policies are needed to close the gender gap in science for the benefit of Europe's society and economy.



Women in Science and Technology – Creating Sustainable Careers

Released by the second Women in Science and Technology (WiST2) working group in May 2009, this report sheds new light on the 'leaky pipeline' (the phenomenon that sees women drop out of research at all career stages) and attempts to build a business case for a good work-life balance.

In spite of the economic climate, the report notes that there are things science and technology companies can do to address gender and work-life balance issues. Specifically, offering work-life balance practices is not enough; the organisational culture needs to provide genuine support to these policies. If messages are mixed (e.g. allowing people to work at home but expecting people to come in at short notice) or negative (e.g. you need to work long hours to get a promotion), people will not use what is on offer. Having an on-site nursery also conveys a message of support to both mothers and fathers.

Employers can protect their best workers from either burning out or opting out by evaluating appraisal procedures to ensure that the use of work-life balance practices is not penalised unnecessarily. Efficiency can also be rewarded by focusing on output rather than long hours for the sake of long hours.

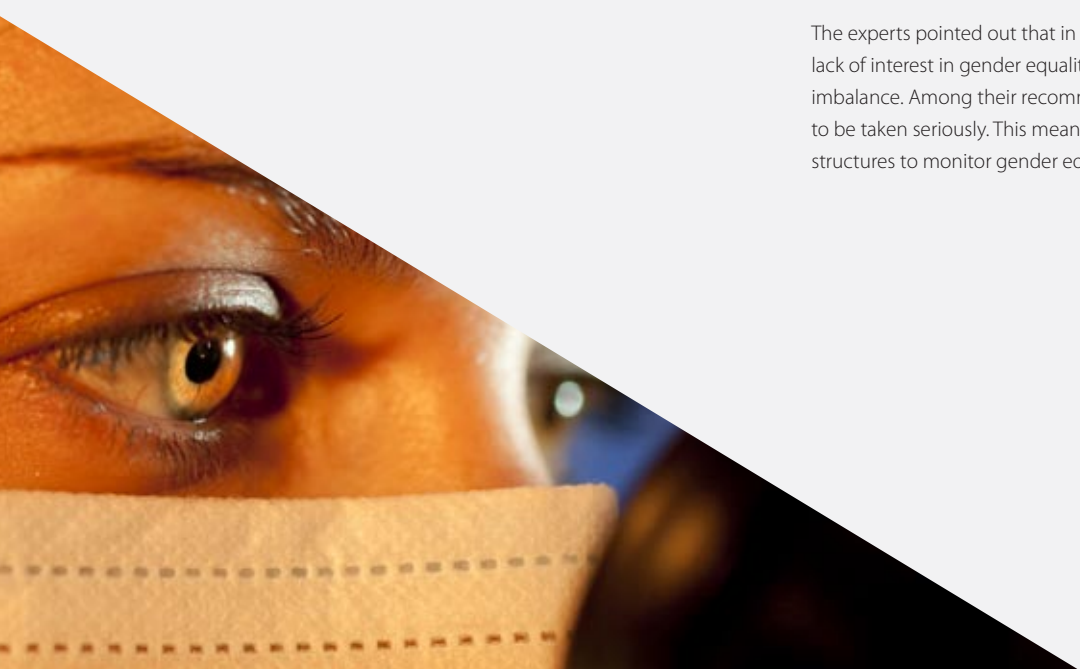
The Gender Challenge in Research Funding – Assessing the European National Scenes

Established by the European Commission, the objective of the Gender and Excellence Expert Group (comprising 16 specialists) was to provide recommendations on the ways to improve the transparency in the procedures used in research funding, with particular regard to the gender challenge in funding across Europe.

The experts carried out the research in 33 countries (27 EU Member States and 6 associated countries). The report details their analysis of the gender dynamics among applicants, recipients and gatekeepers involved in research funding, processes, instruments and criteria. In addition, it examines the role of key funding organisations in promoting gender equality in research.

In the foreword to the publication, EU Science and Research Commissioner Janez Potočnik explains that the analysis shows that very good practices exist with regard to the transparency and accountability of research funding systems. He notes, however, that 'data monitoring is not systematic, and publication of research funding results per gender per discipline is far from perfect'.

The experts pointed out that in several European countries a denial of or lack of interest in gender equality appeared to be one of the main sources of imbalance. Among their recommendations is the need for the gender challenge to be taken seriously. This means a strong political will is needed to support structures to monitor gender equality, and encourage research in this area.



*research*eu – Women and Science – The March towards Equality (special issue, April 2009)*

In a special issue released in April 2009, the European Union's premier research magazine, *research*eu*, focused on the underrepresentation of women in science, particularly in research decision-making bodies.

In his introductory message to the issue, Editor in Chief Michel Claessens notes that the articles featured in the issue confirm that the gender imbalance is not simply a case of bias against women. Rather, the issues stem from deeper sources including cultural problems and social pressures that allocate different roles to men and women. He writes: 'The functioning of various types of solidarity, the exercise of power and the existence of knowledge monopolies explain why exclusion mechanisms apply most often to women, and not only in research.'

The diversity of opinion on the reasons for the persistence of gender imbalance in research is evident in several articles, including a one-page snapshot featuring the viewpoints of five male professionals who have studied these issues. The magazine also includes several success stories (such as interviews with women scientists and a profile on Finland – 'top of the EU class' in gender equality), statistics and research findings, and sources for more information.





***SCIENCE, ECONOMY
AND SOCIETY
DIRECTORATE***

RESEARCH CONNECTION 09

The Communication Unit for the European Commission's Directorate-General for Research is part of the Science, Economy and Society Directorate. In May 2009, the unit organised Research Connection '09, a conference that attracted the participation of some 1 500 people from around the world. The two-day event was an opportunity to find out more about funding opportunities under the Seventh Framework Programme (FP7), the Structural Funds and the Competitiveness and Innovation Programme (CIP) of the European Union, and take part in discussions on some of the most up-to-the-minute research topics. Themes relating to the socio-economic sciences and humanities (SSH) and Science in Society (SIS) were high on the agenda.

Research Connection 09 took place in Prague, Czech Republic, on 7 and 8 May 2009. It was organised under the auspices of the Czech Presidency of the Council of the European Union. The conference was opened by Vlastimil Růžička, Czech Vice-Minister of Education, Youth and Sports, and EU Science and Research Commissioner Janez Potočnik, and featured a presentation by Jeremy Rifkin, best-selling author and president of the Foundation on Economic Trends.

During the event, visitors (including researchers, research managers, policy-making, and journalists) from Europe and beyond attended 48 conference sessions and 15 press briefings, listened to over 160 speakers, and viewed 47 exhibition stands. Some of the experiences and messages from the conference relating to the SSH and SIS Programmes are highlighted below.

Meet the media

A special press briefing featuring three EU-funded projects highlighted the wide range of research activities taking place in the SSH and SIS fields. The WONDERS (Welcome to Observations, News and Demonstrations of European Research and Science) project has created a 'Carousel of Science' through which 31 partners can exchange best practices in science communication. The PRIVILEGED (Privacy in Law, Ethics and Genetic Data) project is investigating the legal, ethical and privacy implications of genetic research and biobanking. Finally, the GARNET (Global Governance, Regionalisation and Regulation: the Role of the EU) project is seeking to create a European Research Area (ERA) for global governance, regionalisation and regulation.

Ethics in FP7

In a well-attended session on the Ethics Review in FP7, Dorian Karatzas from the European Commission reminded researchers that 'ethics should not be seen as a hurdle'. Instead, researchers should realise that reviewing the ethical aspects of their work will result in better research, and help science and society connect more effectively.

A showcase for the roles of SSH and SIS in FP7

The second day of the conference began with a session on the role of SSH in FP7. Director of the Science, Economy and Society Directorate, Jean-Michel Baer, emphasised the broad scope of SSH research, explaining that his goal was to combine the best interdisciplinary research possible to support the Lisbon Strategy, social cohesion, and adaptation to global changes. Mr Baer also pointed out that EU-funded SSH projects now include a growing number of researchers from the new EU Member States.

The session featured a discussion on the current financial crisis. László Halpern of the Institute of Economics at the Hungarian Academy of Sciences underscored the need to avoid asymmetrical credit restraints between EU nations and warned that the pressures of the crisis could precipitate a turning point in the quest for European integration.

The SSH session was followed by a similar presentation of the SIS Programme. The focus of this event was on the importance of ensuring that the ERA is firmly embedded in society and is responsive to society's needs. Mr Baer summarised the session's main points by noting that developing research policy without taking into account the needs and wishes of society can be counter-productive. The main actors from science and society need to be brought together to boost public confidence in science, he concluded.

Harnessing culture and creativity for competitiveness

One of the last workshops at the conference was a forum entitled 'The value of culture and creativity and consequently the importance of humanities research for the creation of a successful and competitive European community'. The aim of the workshop, which was organised with the help of the HERA (Humanities in the European Research Area) project, was to inform an interdisciplinary audience of the contributions humanities research can offer in creating a successful and competitive European community.

According to Wolfgang Mackiewicz, Chair of the European Commission's SSH Expert Advisory Group, the potential of humanities research has not been fully exploited in FP7. Many humanities researchers do not know how to participate in the EU's research programmes, he commented, adding that disciplines such as anthropology, education, ethics, history, linguistics, literary studies, media studies, philosophy, political theory, psychology and religious studies could make valuable contributions to many collaborative projects.

Professor Mackiewicz stated that these subjects provide 'essential social, cultural and ethical anchors for society and play an integrating role in multidisciplinary projects'. On a topical note, he added that the humanities should be given a greater role in providing insights into the causes of the current economic crisis and should help to identify possible ways of dealing with it.

More information on Research Connection 09 is available at http://ec.europa.eu/research/conferences/2009/rtd-2009/index_en.cfm

ERAB'S VISION FOR A EUROPEAN SCIENTIFIC RENAISSANCE

In 2009, the European Research Area Board (ERAB) released its first annual report, *Preparing Europe for a New Renaissance – A Strategic View of the European Research Area*. This landmark publication explores six priority policy areas for Europe to focus on in the next two decades in order to prepare for the many challenges ahead, challenges as colossal as the growing population, climate change, globalisation, shrinking natural resources and the need for sustainable development.

Between the 14th and 16th centuries, a new vision of mankind spread across Europe in which art, literature, philosophy, culture and intellectual pursuits were of paramount importance. Five hundred years later, as ERAB explains in the publication, Europe is standing on the edge of a second Renaissance and it is just as important, if not more so, than the first.

There are now enormous challenges relating to how human beings behave as guardians of the planet. How we respond to these challenges will determine the kind of world we create in the coming decades and the legacy that we pass on to future generations.

The new Renaissance in question concerns science. Scientific knowledge is already feeding and sustaining most of the world's population, and science has robust challenges in front of it to feed, clothe and house the world's continually growing population (due to reach 9 billion by 2030).

Acting swiftly and sustainably

Many other issues need swift responses too. Biodiversity, for example, is shrinking due to climate change, human activities and overpopulation. Global warming is also causing havoc with the planet's ecosystems, causing ocean acidification, contributing to desertification and changing traditional weather patterns around the globe. These problems must be tackled, says the report, but sustainable solutions must be used so that unrestrained development is not allowed to ravage the planet as it has in the past.

The report calls for a revolution in thought, science and society if Europe is to achieve these goals. For a truly vibrant European Research Area (ERA), Europe needs to develop a whole new way of scientific thinking, new scientific activities, and of looking at how we manage the world and its resources. What can we improve through better and more coordinated scientific research and technology, and new approaches in strategy?

Milestones in 2009

ERAB was created in 2008 as an independent advisory body to the European Commission on the best way to achieve the goals of the ERA. The board comprises 22 high-level experts from academia, business and industry. Writing its first annual report was its primary task in 2009. It also proposed the establishment of the post of Chief Scientist and was delighted that European Commission President José Manuel Barroso made a public commitment to this.

The annual report was officially launched with a press conference and an open debate with ERA stakeholders in Brussels on 6 October 2009. It was also the subject of a consultation of relevant stakeholders. In addition, ERAB Chair Professor John Wood presented the main concerns and messages of the annual report to the plenary of the ERA conference that took place between 21 and 23 October 2009.

The vision and how to achieve it

Scientific research must play a full part in society if the ERA is to be realised. In the report, ERAB calls for a 'paradigm shift' in the way society perceives science and what the role and place of science in society should be. The board lays down firm guidelines for how science can remove itself from its academic box and play a more central role in people's lives.

One of the most important ways is by encouraging children to take up careers in science. A scientific career must be seen as exciting, rewarding, fulfilling and challenging to young people. A new style of day-to-day science is also needed, one that takes a holistic approach and encompasses everyone who is involved in the running of our societies such as policy-making, citizens, business people, teachers, scientists and politicians.

In its report, the board also discusses the problem of research fragmentation – still an issue in spite of the many positive efforts to change it. It is important that European research does not remain inward-looking and marginalised or we will lose a great opportunity for creating a prosperous Europe that is competitive, operates on sustainable principles and has a lively and flourishing pan-European research culture.

Six main areas have been identified by ERAB in which European research policy must focus on if the above goals are to be achieved. They are:

- the creation of a united ERA;
- a solution to the 'grand challenges';
- the interaction of science and society;
- collaboration of public and private sectors in open innovation;
- encouragement of excellence;
- the promotion of cohesion.

Thirty concrete milestones are proposed to reach these ambitions.

Sparking a partnership culture

Partnerships are of utmost importance to this vision and there are many ways that Europe can achieve good scientific relationships. The report highlights the necessity for public and private companies, and public and private funding research bodies to forge greater research interaction. Lively and enthusiastic scientific partnerships must be instigated between educational institutes, businesses, research organisations and funding bodies to spark off fruitful research projects for science and innovation.

The EU has many world-class assets, including excellent universities, research institutes, and some of the best scientists in the world. Researcher mobility in the EU, however, is often hampered by inadequate remuneration and social security difficulties. There also needs to be more crossover between the different scientific disciplines, often still entrenched in their traditional categories of biology, physics and chemistry. Another important factor is that there is also a traditional aversion in Europe to risk taking, reducing the likelihood of research teams willing to undertake 'blue sky research'.

In 2009, ERAB set up six internal working groups to discuss how the vision can become reality by 2030. Their proposals will be discussed at a stakeholder conference, planned for May 2010 under the Spanish revolving Presidency of the EU.



A copy of *Preparing Europe for a New Renaissance – A Strategic View of the European Research Area* is available at http://ec.europa.eu/research/erab/index_en.html

PROFESSIONALISATION OF RESEARCH MANAGEMENT

Tackling 'Societal Challenges' under the Socio-economic Sciences and Humanities (SSH) Work Programme through large-scale integrating projects will require a new approach with regard to leading and managing such research. The activities addressed by the challenges, the nature and the size of the consortia and the research strategy to be followed, will require specific skills both at the level of scientific management and at the level of administrative and financial management.

From 2010, large-scale integrating research projects under the Socio-economic Sciences and Humanities (SSH) Work Programme will have to propose a well-defined governance structure with a strong leadership team, allowing for enhanced efficiency regarding the definition of objectives, milestones and timescales. The projects will also need to ensure effective coordination of the involved research teams. The underlying objective is to improve the use of resources, time management and systematic monitoring.

When combined, this 'professionalisation' is expected to have a positive impact with regard to the following:

- timing of projects (e.g. fewer requests for project extensions, and fewer delays and interruptions);
- reporting and approval (e.g. reduced error ratio regarding financial reporting, accelerated approval period, and lower administrative efforts on both sides);
- cooperation within the consortium, and between consortium and the Commission (e.g. decreased risk of friction).

Consortium partners leading the large-scale integrating projects are therefore encouraged to raise the standard of professional and managerial skills represented in their projects in order to make research on Societal Challenges a success. The emphasis is on dedicated researchers, professional managers and communication experts, as detailed below.

Dedicated researchers

A European Societal Challenge cannot be managed by a single senior researcher on a part-time basis. These challenges will require central teams of senior and junior researchers who can steer and develop interdisciplinary cooperation between teams. In this context, the scientific coordinator(s) of the project hold a specific role in ensuring appropriate communication, sufficient linking of the sub-projects, methodological foundation and overall coherence of the project.

Professional managers

In terms of finances and EU funding totals, a European Societal Challenge cannot be managed by the existing (and often limited) staff of European universities and research institutions, particularly as an 'added' role on top of their normal duties. This will most likely require new staff with sufficient time to manage the project and report to the European Commission in due time on tasks that include:

- administrating Community financial contribution;
- managing the allocation between beneficiaries and activities in accordance with the grant agreement;
- keeping records and financial accounts;
- reviewing reports to verify consistency within the project tasks.

The European Commission does not advocate a specific management model. It does, however, believe that managing a Societal Challenge is an opportunity for European universities and research centres to grow and develop new professional skills and competencies.

Specialised communication and dissemination staff

Communication and dissemination to policy-making and the wider public is often seen as the final step in a project. This task will now take on a central role from the outset, where information and results are shared to Europe's citizens in a concerted and transparent way.



More information on Societal Challenges is available elsewhere in this publication.

INTERNATIONAL COOPERATION

Forging greater cooperation between countries within Europe and those outside the region is an objective common to all themes of the Seventh Framework Programme (FP7). In 2009, the Science, Economy and Society Directorate (Directorate L) continued to drive activities and initiatives in support of international cooperation by funding research projects, supporting and hosting key events, and sharing important findings.

SSH and international cooperation

Since 2007, Directorate L has fostered activities in the area of Socio-economic Sciences and Humanities (SSH) with countries in Latin America, the Caribbean and the Mediterranean, as well as China and India. New collaborative inroads into Africa and the US are expected under the 2011 SSH Work Programme, and future cooperation potential is anticipated with south-east and central Asia.

The aim of such a strategy of cooperation is to develop an intellectual partnership around large, collective challenges that affect both whole world regions but also the EU as a world diplomatic partner. For example, Directorate L has developed strong links with research institutions of Latin American and Caribbean countries (LACCs) in order to tackle the socio-economic challenges that the countries face. Here, the EU can share its expertise but also use the opportunity to develop further knowledge.

The communications of 8 December 2005 (SEC(2005)1590) and 30 September 2009 (COM(2009)495/3) clearly set out the need for a stronger partnership between the EU and Latin American countries (LACs), with a specific focus on the issues of social cohesion and regional integration for the period from 2007 to 2013, themes that are of particular relevance to the SSH Work Programme.

EU-LAC cooperation in SSH is also facilitated by the cultural features shared by the two regions, and the high and often similar levels of education of academic staff.

The strategy under the SSH Work Programme is therefore to help strengthen the partnerships between the LACCs and develop cross-border dissemination of ideas, and generate circulation of researchers. This strategy is now embodied in a major research topic in the 2010 Work Programme, which calls for collaborative research between European teams and teams of at least five different LACCs on urgent environmental issues.

Directorate L is also active in other world regions. Two Specific International Cooperation Actions (SICAs) were implemented in the 2009 SSH Work Programme:

- 'Cities and sustainable development' (with some African countries, as well as Brazil, China, India, and Mexico);

- 'Climate induced changes in water resources in southern Europe and neighbouring countries as a threat to security' (with a regional focus on southern Europe, North Africa and/or Sahel zone, and/or Middle East).

Three SICAs are part of the 2010 SSH Work Programme:

- 'Collective challenges for LACC';
- 'Understanding urbanisation trends and processes in contemporary China';
- 'Cultures of governance and conflict resolution in Europe and India'.

SIS and international cooperation

In the area of governance and ethics, the Science in Society (SIS) Work Programme under Directorate L has fostered cooperation with countries in Africa, Asia (particularly China), Latin America, and North America, as well as India and Russia. At the same time, there are also cooperation activities in place with the World Health Organization and UNESCO to address the broader international community.

Participation of invited guests from other countries often takes place in the context of the Forum of National Ethics Councils, which is also administered under the SIS Work Programme with each presidency. Furthermore, the Ethics Review process addresses the issue of international cooperation in a number of ways, including:

- as part of the ethics framework of the Seventh Framework Programme (Preamble 30, Article 6 and the Commission statement on the use of human embryonic stems cells);
- as part of efforts to increase and improve the participation of non-EU countries in the Framework Programme and opening the European Research Area (ERA) to the world;
- as part of the capacity-building actions that are needed internationally in order to achieve the International Cooperation EC strategies.

For these reasons, the Ethics Review Sector has produced dedicated guidance notes to address ethics issues that arise from international cooperation projects, and is proposing to include Ethics Review in cooperation agreements, especially with African and south-east Asian countries.

Under the 2009 call, the inclusion of international partners for research on the implementation of a code of conduct for responsible nanosciences and nanotechnologies research was also encouraged.

In addition, an experts group was established on the global governance of science with input from experts from China, Europe, South Africa, and the US. A true governance of science, after all, needs to take into account developments at international level.

One Specific International Cooperation Action (SICA) was implemented in the 2009 SSH Work Programme on science education with countries in Latin America and Asia. The result in terms of interest and scientific quality was encouraging, and three projects are currently under negotiation.

A SICA on 'Women in science: Euro-Mediterranean cooperation' will be implemented under the 2010 Work Programme. Further joint collaboration will be explored with Africa and Japan in the field of scientific culture and women.

Current indicative projects

In 2009, proposals submitted under calls for proposals to the Directorate's SSH and SIS Work Programmes attracted 509 and 108 participants respectively from third countries. In 2010, researchers and research institutions from third countries are likewise encouraged to participate in proposals submitted under all topics in the SSH and SIS Work Programmes (published in July 2009).

The following projects represent examples of current international cooperation research efforts under the Science, Economy and Society Directorate.

Project title: Collaborative Research on East Africa Territory Integration within Globalisation (CREATING)

EU funding total: EUR 676 417

The CREATING project brings together MA and PhD SSH students from Europe and east Africa for a special training programme in fieldwork methods. The project is organised around four themes, all of which relate to human use and management of cross-border resources: resource management and livelihood sustainability, environmental and climate change, migration and identity, and the role of small and medium cities. Its results are likely to contribute to an enhanced understanding of some of the challenges facing regional integration in the East Africa context.

Project title: Disaggregating Chinese Perceptions of the EU and Implications for the EU's China Policy (CHINESE VIEWS OF EU)

EU funding total: EUR 1.4 million

An increase of just 5 % in EU exports to China would make an annual difference of EUR 3.2 billion to the EU economy. To improve on the way it engages with China, the EU first needs to know how its initiatives and strategies are perceived. Using surveys, interviews and focus groups, this project aims to produce a comprehensive picture of how Chinese people view the EU. Its recommendations are intended to lead to better policies, to help reduce market restrictions, and to increase EU 'green technology' exports, among others.

Project title: Ethical Governance of Biological and Biomedical Research: Chinese-European Co-operation (BIONET)

EU funding total: EUR 739 129

Over the last 10 years, collaboration between China and Europe in life sciences and biomedical research has intensified. This research, which represents a commercial and scientific priority for both partners, raises several challenges for ethical governance of scientific and medical practice. BIONET set up a network within and between China and Europe to address this challenge. Among its many achievements, the project hosted five workshops and conferences in China between 2007 and 2009. Results from the project have informed policy and practice in the ethics of biomedical research in China and the EU.

Project title: Genomics and Benefit Sharing with Developing Countries – from Biodiversity to Human Genomics (GenBenefit)

EU funding total: EUR 548 639

The main aim of GENBENEFIT is to promote policy developments by recommending an 'Ethics Health Check' for benefit-sharing agreements involving vulnerable groups and communities in the area of human genetic resources. The project has established an international, interdisciplinary team with expertise in both human and non-human benefit sharing agreements. The team is undertaking a comparative analysis of four paradigmatic international cases to provide a clear understanding of the common ethical issues involved, and to identify possible policy solutions that will be disseminated among policy-making. International partners to the project are from India, the Philippines and South Africa.

Project title: Homeland Security, Biometric Identification, and Personal Detection Ethics (HIDE)

EU funding total: EUR 963 000

HIDE will engage in a comprehensive scanning of existing resources on ethics and privacy of biometrics and personal detection technologies. It will set up a permanent platform devoted to exploring the issues involved in ethics and privacy of new and personal detection technologies. The project will also reframe and promote debate on the most controversial ethical and privacy issues raised by the convergence between biometrics detection and identification technologies. Beyond various EU Member States, the platform also engages Singapore and the US.

Project title: Rising Pan-European and International Awareness of Biometrics and Security Ethics (RISE)

EU funding total: EUR 919 509

RISE is an international initiative for promoting awareness on the ethical aspects of biometrics and security technologies. The project will deepen, enlarge, and ensure continuity to European and international dialogue already instigated by the international conferences on ethics and biometrics organised by the European Commission's Directorate-General for Research and the US Department of Home Security Privacy Office (respectively in 2005 and 2006). The initiative consists of various EU Member States, as well as China and the US.

Events in 2009

Project Title: Promotion of Pan-European and International Awareness of the Ethical Aspects of Security Technologies (PATS)

EU funding total: EUR 964 594

The overall objective of PATS is to invent a concept of security branding to increase opportunities for voluntary adoption of privacy standards among security organisations. On the one hand, the project will study the degree of privacy awareness across various sectors and firms, and across international government agencies that promote or use security technologies. It will focus particularly on biometrics and closed circuit television (CCTV), as these two merge continuously with each other and imply a whole range of applications (such as motion detection, segmentation, object classification and tracking, and background and behaviour identification). On the other hand, PATS will examine branding and its relevance for a solution in the conflict between privacy and security. The consortium includes international partners from Israel and the US.

Project Title: Promoting International Debate on Ethical Implications of Data Collection, Use and Retention for Biometric and Medical Applications (ETHICAL)

EU funding total: EUR 742 395

Beyond various EU-based organisations, the international consortium includes partners from Ukraine, Chile and Malaysia, and aims to achieve the following concrete objectives (among others):

- formulate an international dialogue on ethical implications of data collection, use and retention in medical and biometric applications in three specific areas (potential data misuse, development of a unique identifier, and international standardisation of ethical requirements);
- develop a guide on government-industry collaboration prerequisites concerning the data collection, use and retention in medical and biometric applications;
- develop a code of conduct for FP7 researchers, concerning the data collection, use and retention in medical and biometric applications;
- identify the set of ethical requirements for international biometric and medical data sharing.

The Science, Economy and Society Directorate organised several events in 2009 as part of its international cooperation strategy, some of which are highlighted below.

'EU-China Workshop on Social Sciences and the Humanities' **12-13 January 2009, Beijing, China**

The two-day Beijing workshop was the first step in establishing a long-term relationship between the Science, Economy and Society Directorate and the Ministry of Education (MoE) of China. The event was opened by MoE Deputy Minister, Zhang Xincheng, and Deputy Director-General of the European Commission's Directorate-General for Research, Anneli Pauli.

The workshop enabled a lively debate between 40 EU and Chinese scholars on the following 4 themes:

1. environment and sustainable development;
2. new perspectives on international relations and cooperation;
3. health and social development;
4. multi-cultures and global civilisation.

Considered a major success by all participants, the workshop served as the main source of inspiration for the definition of the SICA, 'Understanding urbanisation trends and processes in contemporary China', part of the 2010 SSH Work Programme. The SICA is expected to further cultivate cooperation between the EU and Chinese universities in the SSH domain.

Workshop 'The EU and the US in a Changing Multipolar System: Transatlantic Convergences and Divergences' 27 April 2009, Brussels, Belgium

Although diversity exists, bilateral ties between the EU and US have, for the most part, been strong. Of particular significance at present is determining how they will work together to achieve mutual interests on a global front.

Members of leading foreign policy institutions, including the European Council of Foreign Relations and the Institute of Security Studies, as well as experts from global alliances like NATO (the North Atlantic Treaty Organization) and researchers participating in projects funded under the EU's Framework Programmes (e.g. CHALLENGE, GARNET and EU-GRASP) came together to discuss the 'window of opportunity' initiated by Barack Obama, the incumbent President of the US, at the start of 2009.

The workshop addressed key research and ongoing events – and how they affect policy in particular – in four round table sessions, as follows.

- 1) Close or far apart? Mutual perceptions across the Atlantic and what changes with President Obama, chaired by Jean-Michel Baer, Director, Science, Economy and Society Directorate.
- 2) 'Smart power', the EU, US, and the handling of global challenges – finance and climate change, chaired by Gerhard Sabathil, Director, Strategy, Coordination and Analysis, Directorate-General for External Relations.
- 3) Security, fundamental rights and 'hot spots', chaired by Valentin Gescher, Detached National Expert, Directorate-General for External Relations.
- 4) The EU, US and effective multilateralism, chaired by Angela Liberatore, Scientific Officer, Science, Economy and Society Directorate.

Key actors, including representatives of RELEX, have used the workshop as a catalyst to arrange for the launch of a bigger conference at the end of January 2010.

'Environment: Collective Challenges for Latin America and the Caribbean, EU-LACC workshop' 7-9 October 2009, Santiago, Chile

Since the launch of FP7, EU and LACC cooperation in the SSH domain has notably strengthened. The EU implements a regional approach that enables these countries to cooperate collectively to address major challenges. In June 2008, a first workshop held by EU and LACC experts in Mexico identified the challenges in need of urgent attention. This event allowed Directorate L to define a research topic on environmental challenges in LACC in the 2010 SSH Work Programme.

A follow-up workshop was held in October 2009 in which 50 EU and LACC experts (specialised in environmental matters) came together to identify the main questions that need to be answered at the regional level. Four groups worked on the following issues:

1. social and economic uses of environment;
2. environment, poverty and inequality;
3. institutional weaknesses and the role of the state;
4. collective actions and the role of elites.

Conclusions from the workshop were made available on the SSH Programme website and websites of appropriate National Contact Points (NCPs) to enable broad distribution to the academic communities.

Material published in 2009

The following publications represent some of the literature produced in 2009 by the Science, Economy and Society Directorate in support of international cooperation objectives. Copies of these and other publications are available from the SSH and SIS Programme websites.

Embedding Society in S&T policy, European and Chinese perspectives

This publication is the result of a series of highly successful discussions initiated by the 'Ethics in Mongolian and south-east Asian science and technology' project in 2007, which focused on issues of governance and ethics in Europe and Asia in the field of science and technology (S&T). The purpose of the publication is to provide an account of SIS in Europe and China, and is grouped into four main themes:

1. basic concepts in S&T ethics, and differences between the two regions;
2. roles and functions of S&T policy advisors in Europe;
3. policy-making processes in China, and the manner in which advisory structures operate;
4. a comparison between the two regions' approaches with regard to nanotechnology.

A concluding chapter also provides an overview of the lessons learned and suggestions to create a common understanding in S&T policy between the regions. For further information on similar themes, consult the 2009 publication *Governance Civil Society Organisations Seminar*, which documents proceedings from a seminar that took place on 9 and 10 October 2008.

Report of the Euro-Indian Workshop on Cultures of Governance and Conflict Resolution

In November 2008, 25 researchers from Europe and India came together to discuss and compare five specific themes:

1. cultures of governance and perspectives on diversity;
2. global governance and the universal values quest;
3. cultures of governance and mutual perceptions;
4. conflict resolution and human rights;
5. cultural traditions and the road ahead.

This publication, released in 2009, documents the workshop's discussions and includes extended abstracts of the presentations. It also provides a summary of the interesting points and findings, particularly challenges common to both partners, that emerged from the exchange. Contributions to the report have been provided by European and Indian scholars from various disciplines, including anthropology, economics, history, linguistics, political science, semiotics and sociology.

More information on the workshop is available online (http://ec.europa.eu/research/social-sciences/pdf/euro-indian-workshop-proceedings_en.pdf).



WHO'S WHO

The management responsibility of the Socio-economic Sciences and Humanities (SSH) theme under the 'Cooperation' Specific Programme and the Science in Society (SIS) area under the 'Capacities' Specific Programme rests with the Science, Economy and Society Directorate (Directorate L).

Three units within Directorate L are responsible for the scientific content of projects and related policy areas, as follows.

The **Research in the Economic, Social Sciences and Humanities – Prospective Unit** defines and implements the research strategy on economic, social and human sciences, providing various stakeholders with input for evidence-based policy-making in the EU. In addition, forward-looking activities concern world issues, technological development and post-carbon society. In particular, activities in this unit focus on the Lisbon Strategy and post-2010 EU strategy, sustainable development, globalisation, and the new social agenda for the 21st century.

The **Unit for Governance and Ethics** defines and manages research supporting relevant EU policies in the areas of governance (e.g. democracy, citizenship, conflicts and peace), human rights, and ethics. It supports research on science systems, and promotes access to scientific results/expertise and the engagement of civil society in research. It also implements the ethical review of projects funded by the Framework Programmes (FPs).

The task of the Ethics Review Sector within the unit is to conduct ethics reviews of all FP projects that raise ethical questions. Ethics Review is established on the basis of Article 6 of the FP decision, stating that 'All the research activities carried out under the Seventh Framework Programme shall be carried out in compliance with fundamental ethical principles'. In addition, the sector is responsible for the training of research staff in Ethics Review procedures and for capacity building activities both in Member States and third countries.

The **Unit for Scientific Culture and Gender Issues** supports policy development, research and other actions in order to promote science education, awareness of science and technology issues, and general scientific culture and communication; and highlight and improve the position of women researchers in the both the public and private sectors. A key characteristic of actions being developed is the mobilisation and mutual learning of a diverse range of actors and stakeholders.

The **Unit for Administration and Finance** provides support, coordination and monitoring services to administrative (including reporting, IT and legal) and financial processes. It also aims to strengthen the internal controls of the Directorate in order to ensure the optimal use of its resources and sound financial management.

The **Unit for Horizontal Aspects and Coordination** undertakes strategic initiatives, and coordinates the Directorate's research and policy activities. It ensures coherence and maximises efficiency through policy planning in relation to the FPs.

The **Communication Unit** is the 'spokesperson' not only for Directorate L but for all the Directorates within the Directorate-General for Research. It promotes the visibility of European research policy, in particular in the context of the European Research Area (ERA), by providing and improving information on and access to EU supported research policies, initiatives and activities.





The SSH Programme Committee consists of representatives of the 27 Member States and 12 Associated Countries. Its main role is to advise the European Commission's management of the SSH Programme.



The SSH Expert Advisory Group consists of representatives of the European research community. Its main role is to advise the European Commission on the implementation of the SSH Programme.



The SiS Programme Committee consists of representatives of the 27 Member States and 12 Associated Countries. Its main role is to advise the European Commission's management of the SiS Programme.

European Commission

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Science, economy and society Highlights

The Directorate for Science, Economy and Society is part of the European Commission's Directorate-General for Research. It manages both the Socio-economic Sciences and Humanities (SSH) Programme and the Science in Society (SIS) Programme. The 'Highlights of the Year' publication represents an overview of the many activities conducted by this Directorate in 2009.

SSH: <http://ec.europa.eu/research/social-sciences>

SIS: <http://ec.europa.eu/research/science-society>

Websites with practical information on participating in the programmes:

SSH: <http://cordis.europa.eu/fp7/ssh>

SIS: <http://cordis.europa.eu/fp7/sis>



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