Blue Sky Foresight

Emerging Issues shaping European Science & Technology

Newsletter - *November 2009*

Editorial

For the first time in 2006, the European Commission published a call for proposals dedicated to Foresight research under the Cooperation Programme of the Seventh Framework Programme for Research, Technological Development and Demonstration Activities (FP7).

The '*Blue sky research on Emerging Issues affecting European Science and Technology*' as it has been termed, aims to identify issues which are just about emerging and which could have an important role in shaping the European research system in the future. These issues could relate to new and upcoming scientific disciplines, developments in industry and other cross-cutting areas such as demography, sustainable development, energy etc.

Another important and immediate impact is for the projects to provide strategic intelligence that will serve as an input for planning the 8th Framework Programme.

The six projects funded under this theme are characteristized by their creative approach and the novel methodologies that they employ; they bring together leading European experts in foresight and prospective studies and are aiming to establish an extensive dialogue with a broad spectrum of stakeholders, including citizens' views and expectations on the future of Europe and emerging themes of concern.

This newsletter presents a snapshot of the six projects, including a brief description of their aims and objectives and the outcomes they plan to achieve.

With all the projects being well underway in 2009, the reader is encouraged to browse through the individual projects' websites for more detailed information on project activities, such as upcoming workshops and conferences as well as reports and project briefs and to contact the project leaders with specific questions on the projects.

SEVENTH FRAMEWORK PROGRAMME

A Showcase of six Blue Sky Foresight Projects:

iKNOW aims to advance knowledge and tools related to events and trends potentially shaping the future of science, technology and innovation (STI). As part of the DG Research's Blue Sky initiatives, it is designed to create more proactive European research policy that will be capable of anticipating emerging issues, wild cards and weak signals (WI-WE).

With a consortium of eight partners having high level expertise in foresight, and significant IT and WEB experience, iKNOW intends to become a cornerstone for foresight and futures studies in Europe.

iKNOW will compile and analyse the existing world-wide literature WI-WE. It is developing dynamic and interactive Web 2.0 platforms (WI-WE Bank and WI-WE Scan) capable of capturing WI-WE intelligence, and connecting expert knowledge through structured discussions on the potential implications of WI-WE analyses for Europe and other world regions.

These platforms will be supported by an interactive virtual space (iKNOW Community) to facilitate dialogue among researchers and policy-makers on a range of science-related themes.

iKNOW will use three major mechanisms to generate these outputs: structured and continuous scanning of WI-WE, organisation of surveys, interviews, and a cross-national Delphi to gather EU and international views on WI-WE, and validation and dissemination of findings through WI-WE bulletins, policy toolkits and practical guides.

National iKnow Workshops are being organised.

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SESTI - Scanning for Emerging Science & Technology issues - aims at proactively scanning for hard-to-detect weak signals of issues that could over time develop into mainstream or disruptive issues. Such issues, having an uncertain development, distinguish themselves well from trends and megatrends, which are normally quite visible.

In order to discover such "weak signals", an initial "collective intelligence" approach has started wherein participants may input what they consider to be potential weak signals into a wiki-database at www.sesti.info. A wide array of stakeholders, experts, policy makers, and the general public will eventually evaluate the potential weak signals in the database, with regard to novelty, weakness, plausibility, and potential impact to reduce complexity.

The results are expected to have a number of impacts. First, the Project will come up with a wealth of information about what people consider as "outside the ordinary" observations they made. Second, it is likely that some findings could be an "eye opener" where different weak signals can sum up into a bigger picture. Third, it is useful for anticipatory planning and scenario building to have a systematic list about potential weak signals that will be collectively evaluated. And finally, the data can also serve as an information pool for research in foresight social and technological change analysis.

SESTI is conducted within an international consortium that includes the Dutch Ministry of Education, Culture and Science (Min OCW), the Austrian Institute of Technology (AIT, formerly Austrian Research Centres), Manchester Institute for Innovation Research (MIoIR), The Malta Council for Science and Technology (MCST) and is coordinated by the Dutch TNO Innovation Policy group. The JRC - Institute for Prospected Technology Studies (JRC-IPTS) will organize in-depth workshops with national and international policy-makers on the selected topics.

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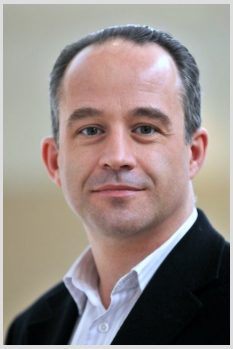
SANDERA
Security and Defence in the European Research Area



The objective of SANDERA is to examine the future relationship between two critical European policy domains: the EU strategy since Lisbon to move towards the European Research Area (ERA) and those EU policies focused on the security of the European citizen in the world.

As a foresight project SANDERA will in particular

⇒ identify drivers of change in the relationship between EU security and defence policies and the ERA;

⇒ develop exploratory scenarios of alternative futures for this relationship;

⇒ analyse the policy implications and develop indicators of change.

The SANDERA team will engage stakeholders throughout the project. Key activities include workshops, a conference, regular newsletters, and the creation of a website to reach out to the public.

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The CIVISTI project is based upon the idea that the process of defining relevant and proactive research agendas could, in many respects, gain from consultation with citizens. Our societies are changing rapidly as a consequence of globalisation, and various developments, will involve an interface between science, technology and society. Citizens are the carriers of the concerns and expectations of the future; such concerns and expectations can be collected, captured and transformed into relevant research agendas.

In short, CIVISTI will:

◊ Produce a list of new and emerging issues for European Science & Technology;
◊ Produce a set of policy options of relevance to future European framework programmes;
◊ Base these products upon a novel process of citizen participation.

First, the project will take a long-term view into citizens' visions for the future. Citizens in seven European member states will make these visions which, in themselves, will be a result, since they will represent trends of relevance to S&T in the future.

Secondly, a process involving experts and stakeholders will use an analytical model to extract the new S&T agendas from the visions of the citizens in order to have an overview of potential new areas for S&T, including an overview of policy options.

Thirdly, the citizens will be consulted again to validate and prioritise the new S&T agendas and policy options; thus providing a set of S&T issues and recommendations, which can directly be fed into the processes of defining FP8.

The CIVISTI project started in September 2008, and since then 70 visions were developed which are now being clustered before they are presented to the group of experts and stakeholders, in order to extract new S&T agendas therefrom.

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INFU - Innovation Futures in Europe

The emergence of new innovation patterns implies re-configurations in European innovation systems with diverse implications for European S&T in the long run.

While a few radical visions have been taking up these signals, there is little systematic exploration of possible future innovation landscapes and their implications for economy and society.

Typical issues that will be addressed include:

* The role of current innovation agents within new innovation patterns;
* The importance peoples' attitudes towards innovation activities and their dependence on cultural context for the emergence of new innovation patterns;
* What business models enable new innovation schemes;
* The type of products for which different innovation patterns will likely gain popularity;
* The relation of new innovation patterns to well-known global mega-trends;
* The implications of new innovation schemes for production patterns (distribution and location of production);
* The environmental impact of new innovation patterns and in particular of user innovations;
* The implications of new innovation forms for regulatory ramework conditions (both enabling and controlling these nnovations).

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With the foregoing in mind, the INFU Foresight project will develop plausible and relevant long-term scenarios of future innovation landscapes in order to orient long-term strategy building for policy and other innovation actors.

FARHORIZON

The FarHorizon project stems from the need to better align research at European level with the range of policy and regulatory competences that Members of the European Union have agreed should be at European level. This alignment through consultations on the Framework Programme, and through actions such as ERANets and Open Method of Coordination could be complemented by strategic targeting of priority sectors.

The aim of FarHorizon is to pilot the use of foresight to align research with longer-term policy needs in Europe. It seeks to advance knowledge on differences across policy domains using the conceptual frame of the 'European Research and Innovation Ecosystem' (also further articulating this concept) in terms of the role and the integration of research agendas in long-term policies. In tandem with this conceptual switch is the notion that the type of integration, coordination and resources envisaged in the ERA concept is only likely to be achieved if actors and policymakers are motivated by engagement in a series of Grand Challenges and other mission-oriented projects.

Four areas with different sectoral characteristics have been selected:

⇒ Climate Change and Agriculture
⇒ Ageing and Policy Coordination
⇒ Policy for Creative Industries
⇒ Innovation Policy

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Outreach

* Senior policy-makers in R&I and sectoral domains in member states;
* Foresight officials and experts in member state research organisations;
* Senior officials in DG Research and other sectoral DGs;
* Academic peers;
* Parliamentarians.

The major dissemination vehicle is the Policy Conference which is designed to assess and learn from the experience in the four areas and to spread the approach to the policy and research domains.

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