

EURAB 05.035

**EUROPEAN RESEARCH ADVISORY BOARD
FINAL REPORT**

**“Science and Society”: An agenda for
a responsive and responsible
European science in FP7**

September 2005

‘Science in Society’ in FP7 embraces a wide spectrum of issues, including questions of governance and scientific advice, ethics and science, gender aspects, communication, education and young people. Actions in FP7 should build on the momentum created by achievements of the theme ‘Science and society’ in FP6, while taking account of the lessons learned.

The combination of a dedicated theme, an effort to integrate these issues across the Framework programme, and national co-operation and co-ordination, is an effective mode of operation and it should continue into FP7. The Commission should develop mechanisms to implement these approaches in a coherent strategy. The dedicated theme should support a critical mass of activities along the lines suggested below. Adequate resources are required for this.

Europe’s future depends on the young

1. The fundamental task for the *Science in Society* programme of the EU should be to bring about a strong scientific culture in Europe where research is understood as an instrument for economic growth, welfare and well-being, democracy and culture.
2. The future lies in the young people now in pre-schools, schools, various vocational training schools and universities. Building on the natural curiosity of children, an interest for science and research must be cultivated from an early age and the ability for critical thinking and reflection developed gradually in school and university. This should be given high priority both at the national and at the European level.
3. The EU should support national or local authorities with ideas and support, based on experience in different member states, in order to improve the teaching of science in Europe. Well-informed and engaged teachers are the best means for reaching the children, but other channels for reaching the young (science centres, publications, film, TV programmes etc.) can also be used and further developed.¹
4. Promising national experiments by teachers and others who want to implement new methods for promoting an understanding of science and research among children and young people should be specially supported at EU level.

Improving public engagement with research

5. The EU should support arenas for discussions and dialogues with the aim of increasing engagement with research at European level between representatives from society and science. Annual meetings, like the Science in Society Forum, the European Science Week and venues like the ESOF conference, play an important role in spreading knowledge about the broad diversity of efforts and the various initiatives in different countries. The Science in Society directorate should offer support, spread good practices, and, possibly through financial incentives, encourage new and innovative ways of public engagement with science and research.
6. The Commission can also encourage the exchange of ideas and methods between countries, and can help add a European dimension where appropriate to national events. Many forms of communication that activate and involve people in debates can be used: Science Weeks, film, theatre, art, music, dance and discussions and events in universities, museums, organisations, ecological centres, industry research facilities etc. The EU should support national efforts by facilitating the sharing of information about on-going work, new initiatives and experiences by conferences, forums, workshops, exhibitions, debates and publications.

7. The AlphaGalileo and the Athena Web audiovisual exchange system providing service for journalists about European research should be further developed, based on best professional experiences of organisations like NASA, CERN and ESA.² The needs of other categories of users should also be met with information adapted to their needs.³

Embedding the societal dimension in science

8. EURAB wishes to underline the importance of integrating ‘Science in Society’ issues elsewhere in FP7, since this enriches the research carried out in the various themes, and enhances its value for society. It adds to the leverage effect of Community research. However, this integration (or “embedding”) must be carried out in a flexible manner, adapted to the different themes, and to individual projects. It should be seen as a stimulating and creative part of research activities, and not as another bureaucratic burden. At project level, this means that activities for public engagement, for example, should be tailored on a case-by-case basis during the negotiation phase of successfully evaluated projects. A corresponding budget needs to be earmarked in projects. ‘Science in Society’ aspects can also be addressed for clusters of related projects and at the level of ‘themes’. Issues related to the broader economic and social impact of programmes and projects should be systematically considered and the success of the projects in this aspect should be an important element of the monitoring and evaluation of the projects.⁴

Institutional links between science and society

9. There is growing interest on the part of civil society to establish more robust institutional links with research activities and institutions. Likewise, research and funding organisations as well as industry begin to realize that it is important to involve ‘society’ at an early stage of new developments. This is already well articulated and understood in domains like health and medical research, environmental issues and sustainable development, safety and risk issues as well as in newly emerging fields like converging technologies. Relevant institutional arrangements between representatives of civil society, researchers and research organizations should be established with the aim of opening up research activities progressively – beyond communication and information – towards greater involvement with society and the establishment of mutual trust.
10. Representatives of civil society in Europe should be encouraged to become actively involved in discussing future promising developments of science and technology and their social impact at an early stage.

Policy and advice

11. Preparations must be made to give advice when needed and requested. This is especially the case when member states have to respond quickly and adequately in situations of crisis and conflicts involving scientific issues. The causes of such challenges (epidemics, natural or man-made disasters, energy policies, environmental impact, security etc) are often global or regional while their forms may be specific to a particular nation or area.
12. The SINAPSE database, recently initiated, will help stakeholders to identify expertise and to facilitate the involvement of actors who are currently hard to consult and should be evaluated on a regular basis and further developed.⁵ NGOs and other associations should have easy access to relevant scientific advice on different issues of concern.

The dynamics of society and science relations

13. The relationships between society and science continue to evolve, sometimes in a turbulent way. Research on these topics, placed in the wider context of the transformation that both, ‘science’

and 'society' currently undergo, should become the core of a small, but innovative research programme. This should be built on what is already available in STS (science and technology studies or studies in science, technology and society). The outcome of the new research programme could be the focus of a series of workshops and conferences, with the aim of involving members of the scientific community, research organizations and universities in order to deepen their knowledge and understanding of the ongoing dynamics of society and science relations.

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- 1 Also see EURAB recommendations from Nov. 2002, EURAB 02.054, "Primary and Secondary Schools".
 - 2 <http://public.web.cern.ch/Public/Welcome.html>, <http://www.nasa.gov/home/>, and <http://www.esa.int/esaCP/index.html>.
 - 3 Also see EURAB recommendations from Nov.2002, EURAB 02.054. "The Public Awareness of Science".
 - 4 NSF judges all grant applications against the following criteria for outreach and communication with society. See http://www.nsf.gov/pubs/gpg/nsf04_23/3.jsp#IIIA2.
 - 5 Scientific Information for Policy Support in Europe, see: <http://europa.eu.int/sinapse/sinapse/index.cfm>