

**PEER Position Paper on the Green Paper of the European Commission
“The European Research Area: New Perspectives”**

August 2007

1. Introduction

With the publication on 4 April 2007 of the Green Paper on “The European Research Area: New Perspectives”, the European Commission launched a wide consultation process and debate on the future of the European Research Area (ERA) by inviting all stakeholders to react on the Green Paper.

In 2001, seven European environmental research centres¹ engaged in a partnership inspired and motivated by the concept of the ERA: PEER - the Partnership for European Environmental Research (<http://www.peer-environment.eu>, see also Annex 1). In doing so, the PEER partners responded to the ERA goal as formulated by the European Council (Lisbon, March 2000). During its six years of existence, PEER has developed into a “living example” of the European Research Area. In their Vision and Mission (see Annex 2), the PEER partners express their commitment towards a more integrated and dynamic collaboration on environmental research with a high international and societal relevance. PEER has initiated strategic research planning, staff exchange and training activities based on its own resources. PEER has also successfully made use of the opportunities provided in FP6 by establishing several major EU projects and a joint Marie Curie training activity. Based on the experience we have gained in our cooperation and integration of research activities, PEER suggests some new ideas for the future development of the ERA.

This position paper follows the general structure of the questions formulated in the Green Paper. First we will give the PEER views on the general questions on page 10 of the Green Paper; next we will go into more detail on some of the questions regarding the six main dimensions of the ERA in chapter 3, with a special focus on 3.3 “strengthening research institutions”.

2. General remarks on the European Research Area Vision

The Green Paper highlights six essential elements of the ERA: mobility of researchers, world-class research infrastructures, excellent research institutions, sharing of knowledge, well-coordinated research programmes and priorities, and the opening of the ERA to the world. Three cross-cutting concerns are further identified by the Green Paper: Societal demands to European research policy, a balance between competition and cooperation in research in Europe, and the benefit from Europe’s diversity. Below we give some general comments on the three main questions raised by the Green Paper.

Are these the essential elements that the ERA should provide? Are there other elements which should be taken into account in the vision?

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We strongly support the six main and the additional three cross cutting elements. However, each single element is not sufficient for building the ERA, only all elements together and linked by a joint understanding of the ERA concept allow to create a common ERA identity and to further develop a world-wide competitive ERA. Our experience from the PEER collaboration clearly shows the importance of a joint vision for the realisation of common research targets, even in situations where the partners have considerably different funding structures, legal positions and operational procedures. This aspect deserves more attention in the ERA vision because the heterogeneity of national research landscapes in Europe can be considered both as a potential strength and as a weakness and remains one of the important challenges for the ERA. The commitment of all kinds of research institutions to contribute to the ERA is crucial.

A second general remark is the need for a more specific vision on the instruments to put into practice the three cross-cutting dimensions. In our PEER experience these instruments are crucial for the realisation of the ERA vision, but were not elaborated to the same level of detail as the six main dimensions. For example, in the Sixth Framework Programme (FP6), specific targeted research projects funded under the programme "Scientific Support to Policies" turned out to provide a good instrument for linking policy and research. As the Seventh Framework Programme does not have this instrument, closer attention needs to be paid to this link.

What should be the roles of EU, national and regional policies to establish such an ERA and take best advantage of the European dimension in the context of globalisation and national and regional specialisation?

Regarding the role of the EU, we want to stress three important actions the EU should foster:

- Speeding up the development process towards the ERA by supporting and stimulating organisations and networks (international, national and regional) that can be considered as ERA "front-runners". The best practices should be systematically collected and shared in order to stimulate the "followers" in the process of institutional reform.
- Putting more emphasis on the socio-economic impact of scientific research including the use of strategic and applied research in policy development and public decision making. Scientific excellence is a prerequisite, but is alone not sufficient to stimulate and disseminate the innovation that is needed to overcome the European knowledge paradox.
- Optimising the linkages between European initiatives and research activities at national and regional levels. This is of crucial importance for building the ERA having in mind that the major part of research funding is provided at national and regional level. The ERA-NET scheme implemented in the 6th Framework Programme was a first attempt at providing that linkage but was limited to research programmes of Ministries and Funding Agencies and thus failed to mobilise resources of "institutional programmes" and institutional research. The Framework Programmes so far mainly influence the competitive part of the funding and only indirectly and slowly the institutional resources, which are, however, the major part of the budget of most European research organisations.
- As mentioned above, the great challenge is building the ERA solidly based on the very heterogeneous institutional background of organisations and at the same time preserving those aspects of heterogeneity that are essential for the research organisations to fulfil their specific roles in the national innovation systems. This challenge has not been addressed by the instruments of the Framework Programmes. PEER therefore suggests a new support measure which will be elaborated in more detail in section 3.3 of this paper.

What EU initiatives could best leverage overall public and private efforts to realise the vision?

In addition to the initiatives mentioned above, the following elements should be considered:

- The Green Paper lacks an integrated approach. Research policies must be better integrated with other policies, e.g. employment, industry, environment or health.
- Further elaboration is needed on the means to make European research more competitive, including links with industrial research. The Green Paper puts much emphasis on globalization and how to make European research more competitive. However, except for the reference to Technology Platforms / Joint Technology Initiatives little is said about the means provided to achieve this goal in collaboration with partners in the private sector. Knowledge

sharing and partnerships between public research organisations and industry will not be established automatically – otherwise these links would already be stronger in Europe – but could benefit from novel supporting measures provided by the EU that offer clear incentives for co-operation and that lower existing barriers.

3. Specific comments on the main dimensions

Specific comments are provided on some chapters of the Green Paper which are of particular relevance to PEER and additional measures for developing the ERA are suggested.

3.1 Realizing a single labour market for researchers

A clear European strategy to attract best researchers should be set up. Effective tools to attract and train researchers for a research career are required on European level. The Marie Curie Programme has proven to be a very good tool to achieve this aim. Relocating this task to national programmes as partly envisaged now should only be done with utmost care. Motivation for pan-European and international mobility must not be frustrated by different national standards and aims.

In addition to the current Marie Curie programme open to any scientific area, specific Marie Curie actions should be put up to support researchers' mobility in those areas which have been identified as priorities for European research. Career development for people in charge of accompanying research functions (project managers; engineers; technicians etc.) should also be addressed together with research careers. In general, more must be done to enable cross European scientific careers. The low portability of social security is still hindering medium and long term mobility and therefore the Commissions' proposal on a directive on improving the portability of supplementary pension rights is strongly supported.

3.2 Developing world class research infrastructures

High quality research infrastructures are essential for the ERA. The Green Paper focuses primarily on large-scale activities as mentioned in the ESFRI roadmap or GEANT. It should be noted that such a focus on a limited number of large-scale infrastructures benefits primarily few research areas that typically use such infrastructures (e.g. plasma physics, polar research). Other research areas such as terrestrial environmental research equally depend on research infrastructures, which, however, are of smaller scale and often spatially distributed, but likewise of pan-European relevance. In fact, a multitude of such distributed small and medium scale infrastructures exist on national and regional level, being a pre-requisite for innovative research.

Unfortunately, systematic information on these infrastructures across national borders is still too scarce. It is therefore of utmost importance that networks of small and medium scale infrastructures are established, and open access to these networks is fostered. Funding should be provided for the linkage and joint use of such infrastructures as well as the concerted development of new ones. This is crucial for an efficient collaboration and novel comparative analyses at a European level. The Infrastructure for Spatial Information in Europe (INSPIRE) is of key importance in this context and should be developed further.

3.3 Strengthening research institutions

FP6 has successfully introduced new instruments for developing the European Research Area. Two instruments have been specifically designed for the harmonisation of strategic research activities: 1) at the research teams levels: networks of Excellence (NoE) to enhance the networking of excellent scientists across Europe in specific thematic fields; 2) at the level of national or regional research programmes: the ERA-Net instrument to better link the strategies of national and regional funding agencies. Both instruments have a structuring effect especially on the competitive funding. However, so far no instrument exists for fully mobilising the institutional

funding of research bodies (i.e. research institutes and universities) on the European level. For this purpose we propose to create an instrument having a similar design as ERA-Net, but with a different target. The objective of this instrument would be to enhance cooperation and coordination of institutional research programmes carried out by European research institutes and universities, and also industry. This would be achieved by networking and strategic programming of their research, including their "mutual opening" and the development and implementation of joint activities. This new instrument would be most efficient to create the "virtual research communities" or "partnerships" envisaged by the Green Paper. Up to now, no support measure for creating such "institutional" partnerships of research organisations exists. The chosen project type to implement this new measure could be coordination actions.

This instrument complementing ERA-Net, should cover any field of science and technology and specifically support activities such as:

- Systematic exchange of information and good practices on existing institutional research programmes
- Identification and analysis of common strategic issues, that could lead to the design of future multinational schemes and programmes; development and preparation of specific cooperation agreements or arrangements;
- Identification of new opportunities and gaps in research; identification of "horizontal issues" of common interest; identification of mutual complementarities;
- Development of mechanisms for clustering institutionally or nationally funded research projects and development of multinational evaluation procedures of programmes;
- Establishment of joint infrastructures and joint use of existing infrastructures;
- Data harmonisation and data accessibility. This is a key point; progress in this field is essential for the success of many other points mentioned;
- Identification and analysis of administrative barriers that hinder transnational cooperation activities; development of schemes for joint training activities and for personnel exchange.

Eligible to this instrument shall be any European research body that carries out a research strategy organised in one or more programmes with clearly defined objectives and deliverables.

3.5 Optimising research programmes and priorities

Societal challenges need to be better reflected in research priorities. The European Technology Platforms approach and any other programming process would benefit from a stronger involvement of civil society organizations. Europe could take inspiration from some global initiatives such as the IPCC (Intergovernmental Panel on Climate Change) to support policy making on major societal challenges in specific priority fields.

Consistency between national and European calls for projects (notably FP calls) should be pursued and encouraged by the European Commission, in order to foster complementarities and not antagonisms. This would include (but not be limited to) the timing of calls; project structures; evaluation procedures etc.

3.6 Opening to the world: international cooperation in S&T

Joint international cooperation activities are a good way to promote the areas where EU has a substantive added-value in science and technology (e.g. Environment). Emerging economies such as China, India, Brazil etc. should be seen as opportunities to promote and develop our unique know-how and expertise. Further analysis should be provided on the advantages (reciprocity; mutual interests...) and limits to joint international cooperation approach with these countries. The opening of the FP thematic priorities to partners from third countries is highly appreciated and should be further promoted.

The Partnership for European Environmental Research wishes to thank for the opportunity to comment on the Green Paper and reconfirms its strong commitment to the development of the European Research Area.

The PEER members:

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Cemagref – Centre for Agricultural and Environmental Engineering Research (France)

IES – Institute for Environment and Sustainability – Joint Research Centre (European
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NERI – National Environmental Research Institute – University of Aarhus (Denmark)

SYKE – Finnish Environment Institute (Finland)

UFZ – Helmholtz Centre for Environmental Research (Germany)

Annex 1: PEER brochure

Annex 2: PEER Vision and Mission Statement