

Position of the Helmholtz Association of German Research Centres on "Joint Programming of Research Programmes"



## "JOINT PROGRAMMING" AS A KEY PROCESS TOWARDS MORE EFFICIENT INTEGRATION OF EUROPEAN RESEARCH

In the initiative of the European Union for Joint Programming of Research Programmes<sup>1</sup> the Helmholtz Association of German Research Centres sees an opportunity to intensify collaboration in research at the European level and is ready to participate actively in this undertaking. In the view of the Helmholtz Association, the following aspects in the definition and implementation of "Joint Programming" are of particular importance:

- The Helmholtz Association welcomes the consultation of the scientific community in the CREST-moderated process.
- To complement the "Joint Programming" process focusing on national research programmes, the Helmholtz Association further recommends taking into account existing programmes defined and carried out by research organisations and institutes.
- "Joint Programming" should also take into consideration European research infrastructures of international dimension, as they represent focal points for cutting-edge European research clusters that stimulate the development of new research themes.
- The Research Framework Programme and the Specific Programme "Cooperation" at its core have been and will continue to be important for the realisation of the European Research Area. "Joint Programming" alone is not sufficient to achieve this goal.
- "Joint Programming" as implemented by the Member States cannot be a substitute for national research programmes and should therefore not be a motive for reducing national research budgets.

<sup>1</sup>COM (2008) 468 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Towards Joint Programming in Research: Working together to tackle common challenges more effectively"; Council conclusions concerning joint programming on research in Europe in response to major societal challenges (03.12.08) 16775/08

### Introduction

The communication of the European Commission on "Joint Programming in Research" aims to increase and improve "cross-border collaboration, coordination and integration of Member States' publicly funded research programmes in a limited number of strategic areas", "... and thus to help Europe boost the efficiency of its public research funding so as to better address major societal challenges."<sup>2</sup>

The Helmholtz Association sees in this initiative an opportunity to intensify collaborative research at the European level. The major societal challenges and urgent problems of our time, such as climate change, a secure and sustainable energy supply, protection of the environment and demographic developments in Europe, require strategically oriented research over the long term that includes all relevant disciplines and available resources. Meeting these challenges will require a balance between top-down and bottomup approaches that include all relevant stakeholders and take into account the transaction costs involved with cross-national collaborations. Where appropriate, previous experience with existing instruments, especially ERA-NET and ERA-NET+, should be integrated into the "Joint Programming" process.

In the opinion of the Helmholtz Association, "Joint Programming" should respect the subsidiarity principle. To this end, the Helmholtz Association proposes that the "Joint Programming" process as set out by the Commission and the Council be implemented as follows:

- Joint definition of a vision and a strategic research agenda including all stakeholders
- Realisation of the strategic research agenda under the individual responsibility of the respective stakeholders according to a jointly agreed implementation plan

In addition, the following aspects are of particular importance in the definition and implementation of "Joint Programming":

#### Integration of the scientific community into the CREST-moderated "Joint Programming" process carried out by the Member States

Under the umbrella of CREST, a high-level group is now working to identify possible themes for "Joint Programming". The high-level group will further support the definition and implementation of "Joint Programming" approaches. We welcome the integration of relevant stakeholders and members of the scientific community into this process<sup>3</sup>, since they possess valuable know-how in their respective specialist areas, know the international research landscape and in many cases already participate informally or officially in existing research networks.

#### Coordination of existing programmes at the level of the research organisations and institutes as a complement to the CREST-moderated "Joint Programming" process

The coordination of national research programmes, which often focus on project funding of topics over the short to medium term, is important within the framework of "Joint Programming", but is not sufficient by itself to find solutions for the major societal challenges and urgent problems of our time.

Long-term programmatic research in Europe is to a large degree performed by research organisations and institutes<sup>4</sup>. The Helmholtz Association therefore recommends that research organisations and institutes participate in the coordination process to help identify themes and instruments of relevance for joint coordinated research activities. This should be accomplished through a self-determined, bottom-up process of exchanging information and sharing expertise, carried out on a voluntary basis according to the principles of variable geometry and open access. The critical mass and resources thus achieved will make it possible to tackle certain scientific tasks even more effectively and efficiently. The participation of research organisations and institutes will thus complement and reinforce the "Joint Programming" process at the level of national funding institutions.

In a number of thematic areas relevant to "Joint Programming", research organisations and institutes are already exchanging information, comparing their strategic research agendas and initiating joint projects.

One example of this is the European Energy Research Alliance (EERA<sup>5</sup>), which was created in response to the Strategic Plan for Energy Technology (SET Plan) of the European Commission. EERA comprises the ten largest research organisations in ten different European countries. A key objective of EERA is to coordinate the activities of its members in the area of energy research more effectively and create more synergies through a bottom-up process. The EERA initiative follows the principle of voluntary cooperation and variable geometry. In principle it is open to all who are ready to commit themselves to carrying out programmatic research over the long term. Industry and university partners are included in these activities.

<sup>&</sup>lt;sup>2</sup>COM (2008) 468 Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "Towards Joint Programming in Research: Working together to tackle common challenges more effectively"

<sup>&</sup>lt;sup>3</sup>Council conclusions concerning joint programming of research in Europe in response to major societal challenges (03.12.08) 16775/08, paragraph 10.

<sup>&</sup>lt;sup>4</sup>According to Eurostat, "Statistics in focus 91/2008," research organisations in 32 European countries received 50.3% of public expenditures for research and technological development in 2006. The Helmholtz Association with its 28,000 employees has an annual budget of 2.4 billion Euros, of which around two-thirds is institutional funding.

<sup>&</sup>lt;sup>5</sup>http://www.eera-set.eu

Other examples for the bottom-up coordination of research programmes include PEER (Partnership for European Environmental Research)<sup>6</sup> and EREA (Association of European Research Establishments in Aeronautics)<sup>7</sup>. In PEER, seven European research organisations which carry out strategic programmes in environmental research have joined forces, bringing together their expertise to carry out collaborative research projects in the area of climate change. EREA is an association of seven European institutions in aeronautics with the objectives of intensifying their research and technological collaborations in selected areas and contributing to the development of European aeronautics through improved integration of their programmes and activities.

A fundamental principle of joint strategic programme planning must be to try to bring together all the necessary stakeholders. A good example of this is the "Advisory Council for Aeronautic Research in Europe (ACARE)<sup>8</sup>, in which the Member States, the European Commission, research institutions, industry and end users are represented. Through ACARE, industry and public research partners have succeeded in balancing their respective research agendas to mutual advantage.

#### Adequate consideration of research infrastructures in "Joint Programming"

Research infrastructures should be given a role in "Joint Programming" that is commensurate with their importance in Europe. Research infrastructures of appropriate size and quality act as focal points in the formation of clusters of world-class research, education and innovation. They provide the impetus for the emergence of new research themes that in turn stimulate the definition of new research programmes with an international dimension. In interaction with ESFRI, the "Joint Programming" process should therefore give adequate consideration to the construction, expansion and use of research infrastructures of European and/or worldwide importance.

Beyond "Joint Programming" at the CREST level, the independent sharing of information and expertise among European research organisations and institutes can facilitate progress towards the realisation of many excellent small- and medium-sized infrastructures that are not yet on the ESFRI list.

<sup>6</sup>http://peer-initiative.org <sup>7</sup>http://www.erea.org <sup>8</sup>http://www.acare4europe.com

#### "Joint Programming" as an appropriate complement to the EU Framework Programme for Research and the Specific Programme "Cooperation"

The European framework programmes for research and technological development together with their funding instruments are anchored in the EC Treaty and continue to be of great importance for implementing the European Research Area. They can be supplemented by "Joint Programming".

The efficient implementation of "Joint Programming" as presented in the Commission's communication and the conclusions of the European Council will be of value in and of itself because it will enhance processes of exchange and cooperation among the Member States and the stakeholders and therefore contribute to improved integration of European research. "Joint Programming" by itself, however, will not be sufficient to achieve the objectives of the European Research Area.

Through the Specific Programme "Cooperation" researchers from all the Member States and Associated Countries enjoy direct and equal access to European research funding, and at the same time are given opportunities to network both at the European level and internationally. This is particularly important for scientists from the smaller Member States, since without access to well-endowed national research programmes their participation in actions arising out of "Joint Programming" would be limited. Furthermore, the Cooperation programme enables current research themes to be investigated quickly and flexibly at the European level by consortia formed on an ad-hoc basis. The Specific Programme "Cooperation" also supports the transition from pre-competitive to competitive research, and as a result enhances knowledge transfer throughout Europe.

"Joint Programming" as moderated by CREST and carried out by the Member States should be supported by further measures in the framework programme that are flexible and simple to implement. For example, additional network structures and coordination and support actions can be implemented in specific research areas in order to further stimulate the coordination process among research organisations and institutes and create added value to leverage the Joint Programming process.

The coordination of research programmes should interface at different levels: through the CREST-moderated process of "Joint Programming", the bottom-up coordination of programmes by research organisations and institutes and in interplay with the EU research framework programmes. "Joint Programming" as implemented by the Member States cannot be a substitute for national research programmes and should therefore not be a motive for reducing national research budgets.

# **BRIEF PORTRAIT OF THE HELMHOLTZ ASSOCIATION**

In the Helmholtz Association, 16 German research centres have joined forces to share their resources in strategically oriented programmes to investigate complex questions of societal, scientific and technological relevance.

They concentrate on six major research areas: energy; earth and environment; health; key technologies; structure of matter; and aeronautics, space and transport. The scientists work closely together across the centres on these issues.

The Helmholtz Association provides the necessary resources, a framework for long-term planning, a high concentration of scientific competence and an outstanding scientific infrastructure with major projects, some of which are unique worldwide.

The research objectives of the Helmholtz Association are set by the funding bodies after discussions with the Helmholtz centres and the Helmholtz Senate and Assembly of Members. Within this framework, the scientists of the Helmholtz centres determine the themes of their research through strategic programmes in the six research areas across centres.

(Source: "Strategy of the Helmholtz Association," Berlin 2007)

#### www.helmholtz.de

### **Helmholtz Centres**

- Alfred Wegener Institute for Polar und Marine Research
- Deutsches Elektronen-Synchrotron DESY
- German Cancer Research Center
- Deutsches Zentrum f
  ür Luft- und Raumfahrt
- Deutsches Zentrum f
  ür Neurodegenerative Erkrankungen (DZNE)
- Forschungszentrum Jülich
- GSI Helmholtz Centre for Heavy Ion Research
- GKSS Research Centre Geesthacht
- Helmholtz Zentrum München, German Research Center for Environmental Health
- Helmholtz Centre for Infection Research
- Helmholtz-Zentrum für Infektionsforschung
- Helmholtz Centre for Environmental Research UFZ
- Helmholtz Centre Potsdam GFZ, German Research Centre for Geosciences
- Karlsruhe Institute of Technology
- Max Delbrueck Center for Molecular Medicine (MDC) Berlin-Buch
- Max Planck Institute for Plasma Physics (associated member)

This paper presents a consensus of the views of the Helmholtz Association and its centres.

Please direct further questions and comments to:

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