



Federal Ministry
of Education
and Research

Comments of the Federal Government
to the European Commission's Green Paper
„The European Research Area –
New Perspectives“

I. Introduction

Since the EU Commission issued the communication "Towards a European Research Area" (January 2000), the idea of a joint European Research Area (ERA) has informed the direction taken by all the measures concerning research and development in the Community and has represented one of the cornerstones for realizing the Lisbon objectives.

Seven years after this communication, the Commission is putting forward a Green Paper "The European Research Area: New Perspectives" which represents an important assessment of the current situation and contains key proposals for a new orientation of the ERA. This could not have come at a better time: the 7th Framework Programme for Research contains key elements of the ERA. These include the foundation of the European Research Council (ERC), plans for joint technology initiatives, improvements to mobility, the roadmap of the European Strategy Forum on Research Infrastructures (ESFRI), the wider opening of

the Framework Programme to academics from all over the world and the establishment of new subjects of particular relevance to Europe, such as research into security. At the same time, science and innovation partnerships are becoming part of the European Institute of Technology (EIT). Further, the Commission's communication on knowledge transfer between Universities and businesses is an important basis for discussing more efficient cooperation between public and private institutions.

The Federal Government welcomes the main points discussed in the Green Paper, considering them a good starting point for developing the European Research Area effectively into a single market for research. In order to achieve the necessary progress in a reasonable timeframe, the following areas require closer consideration and should be included in the next stages of the Green Paper. Against this background, the Federal Government currently has the following comments on the subject areas covered:

II. Creating and deepening the European Research Area

1. Creating a single European labour market for researchers

- The Federal Government welcomes the Commission's call to create a single labour market in Europe for researchers. A labour market of this nature is a central requirement if Europe is to succeed in the global competition for talented and highly qualified researchers. The EU must commit itself more strongly to making Europe the most attractive research location for top level academics from all over the world. The Federal Government therefore emphasises that the European labour market for the best researchers and academics must be further integrated and at the same time obstacles to mobility in Europe must be further dismantled.
- The Federal Government supports the request by the EU Commission for equal opportunities for men and women in research and science. The number of women aspiring to a career and establishing themselves in leading positions in this area must be increased.
- It is important that all the measures taken to advance harmonisation should not jeopardize researchers' freedom. In principle, voluntary measures, such as the European Charter for Researchers should always be preferred to legally binding regulations. Despite all the difficulties and challenges of managing mobility, the Federal Government points out that these problems will occur less in limiting the national labour markets for employment of members of the scientific community from other countries. For example, 25% of directorships at the Max Planck Society alone are held by scientists from other countries. Appropriate support of junior scientists plays a crucial part in improving mobility. The EU should help those involved in graduate training throughout Europe to cooperate, so that excellent training programmes for graduates can be funded and disseminated and secondly so that mobility becomes customary already at this stage. The Marie Curie Programme in the framework programme should, as it has hitherto, give priority to serving this purpose at European level and therefore continue to expand, both financially and technologically.
- The Federal Government notes that the development towards greater mobility should be seen not only on a geographical level, but also as an intersectoral issue. Transdisciplinary exchange is as important as exchange between basic and applied research and therefore also as important as that between academic research and industry.
- The social security systems in Europe are coordinated by directives 1408/71 and 574. The purpose of this coordination is to ensure that persons who make use of their right to move

around freely are not disadvantaged where their social security is concerned. The Federal Government is of the view that this is also a requirement of researchers. The Federal government welcomes in principle a guideline on the portability of supplementary pension claims. However, it must be ensured that on the one hand the employee's mobility is increased, but on the other that no new obstacles are created which impede the setting up and accumulation of company retirement provision.

2. Creating world class research infrastructures

- Like the Commission, the Federal Government is of the opinion that the European Research Area requires world-class research infrastructures. The growing value of international cooperation and financial support from the Research Framework Programme is particularly apparent in research infrastructures. The Federal Government has, like the European Commission, adopted the new ESFRI definition of research infrastructures. This definition not only includes large facilities, but also knowledge resources for research such as collections, archives, structured information or databases, and also IKT infrastructures. It is now almost impossible for many of these research infrastructures to be funded from national efforts. The Federal Government would therefore welcome greater participation than hitherto from all the European States in financing pan-European research infrastructures. Particularly in light of the 3% target, the Member States are facing a big challenge in remedying the current underfinancing of research structures in Europe.
- The Federal Government also shares the view that the lack of a suitable legal structure is an obstacle to joint realisation particularly of new pan-European research infrastructures. The only existing European legal form (EWIV) is problematic because liability cannot be excluded. Therefore, the Federal Government would – as far as is necessary – welcome the creation of a new, flexible, preferably simple legal framework for Europe for research infrastructures. Regulations governing conditions for access to and use of infrastructures should be as simple as possible in light of the aims of the 7th Framework Programme. Control over and use of the infrastructures should be allocated in accordance with the proportion of funding.
- The Member States already have available to them an initial overview of the key projects in the form of the ESFRI list. The implementation of the ESFRI roadmap should therefore be tackled as quickly as possible within a framework of clear and transparent rules. Along with the realization of these first projects, further development of the roadmap in compliance with

the instructions of the Competition Council should not be neglected. The research policy priorities of the Federal Government and the European Union should in the future be reflected proportionately in the projects on the ESFRI list.

The Federal Government supports the view of the Commission that a broad spectrum of sources of funding for research infrastructure must be investigated; for example, there should be more emphasis on mobilising private capital. However the European Structural Fund should also make a larger financial contribution to setting up new research infrastructures and electronic infrastructures such as the broadband communications required for access to networked research activities.

- The Federal Government shares the assessment of the Commission that the global coordination of new research infrastructure will increase in significance in the future. The conclusions drawn by the Competitiveness Council on 22nd May 2007, in which the Commission and the Member States are invited to explore the potential for international cooperation with the main global players in suitable forums, are an important step forward. The experience and the options offered by the Organisation for Economic Cooperation and Development (OECD) and the Global Science Forum that it supports should be involved in this.

3. Strengthening research institutions

- The Federal Government welcomes the Commission's support for strengthening research institutions and universities in Europe. Crucial to this improvement is firstly that the deciding criterion in funding research is excellence. Secondly, the autonomy of research institutions in terms of their scientific freedom is very important to the Federal Government. However, this should not exclude strengthening relevant subject areas with specific incentives.
- There must be better cooperation between publicly funded research and industry so that science and research can strengthen the industrial base of the EU. Knowledge can be converted to growth with more private investment in research and development and the creation of leading markets for technology and knowledge-intensive products and services. Improved cooperation can furthermore make the European research landscape substantially more attractive to private investment in research and development. The Federal Government therefore underlines the significance of cooperation between academic institutions and business as an important initiator of innovation in Europe. The Federal Government supports the development of interdisciplinary and intersectoral clusters. Creating clusters with competitive elements applying excellence as a criterion plays a special part in supporting research. Results from research into innovation reveal that successful clusters are often those where the actors are close in terms of content and region. The significance of regional politics for research was confirmed in the conclusions

drawn by the Council on 25th June 2007 in the report from the Scientific and Technical Research Committee (CREST) "How to achieve better coordinated use of the Structural Fund and the Framework Programme to support Research and Development". It is precisely research done in regionally based businesses that offers new impulses and allows new forms of progress and which can keep pace with international developments. Regional research and innovation strategies can provide the basis for achieving benefits of scale and scope and for creating successful industrial clusters. The European regions were therefore recommended to develop coherent programmes for research and innovation to prepare themselves for their role in the new European and global economies. Duplication of effort in initiatives from management as part of the competitiveness and innovation programme must be avoided.

- With the foundation of the European Research Council and associated "pioneering research", a new model has been established for modern basic research in Europe. Research and development is vital as the basis for European competitiveness. Every effort must continue to be made to develop sufficient competition potential in basic research. Modern basic research has not yet been so effectively anchored in the innovation process as to fully exploit its potential. However, with excellent pioneering research, the potential for innovation and competition in Europe can be increased substantially. The Federal Government would therefore like to stress that modern basic research in the form of pioneering research must be integrated permanently into the concept for the European Research Area. In the interests of developing our society, there must be new awareness of the significance of basic research that will allow new ground to be broken and evaluation of and concentration on well-chosen instruments.
- The networking of research institutions to form centres of excellence is welcomed, provided this results in genuine added value for Europe. In order to be successful, the centres must be developed on the initiative of the institutions. For this reason, only appropriate outline conditions should be laid down at European level in order to motivate the institutions interested in getting involved. The structures must be designed with science in mind; bureaucracy must be strictly limited. Setting up centres of excellence can attract particularly those member states that are still building up their own effective research landscape. A central element of research funding in the European Union is scientific excellence. Support should be given to research and development throughout Europe through other instruments in order to achieve a high standard of quality.
- The Federal Government shares the view of the Commission regarding the significance of a European Institute of Technology as support for the European Research Area. The Federal Government sees the EIT as a central element in a comprehensive strategy to mobilise knowledge and innovation and which represents a key to growth and employment.

- The Federal Government is of the view that with the EIT active primarily within the framework of autonomous, high-achieving partnerships of universities, research organizations, the business community and other participants in the form of strong and in the long term independent strategic networks (Knowledge and Innovation Communities – KICs) sustainable innovation processes will develop. Political agreement on the proposed directive on the EIT under the German Presidency of the Council on 25th June 2007 offers the central basis.
 - The Federal Government emphasises that political agreement on the proposed regulation on the EIT underlies the core of the innovative concept of the EIT for the European Research Area which is quite separate from the networks of excellence, the knowledge regions, the technology platforms and the resulting technology initiatives of the 7th Framework Programme and offers additional and sustainable added value for innovation in Europe.
 - The Federal Government also points out that the key points agreed in the proposed regulation on establishing, equipping and developing the knowledge and innovation clusters (KICs) and on the work of the EIT must be integrated permanently in the concept for the European Research Area.
 - Europe has a leading role in producing knowledge. To secure this claim to leadership and to improve European competitiveness in the long term, new forms of knowledge production and knowledge management must be developed and implemented systematically. The current "Shanghai Ranking" illustrates the great challenges facing European universities in the global competition to produce knowledge and win the best minds in the world. They must therefore crystallise to form a new dynamic process and adhere to best practice, amongst other things, to meet the global challenges with suitable modern structures in the knowledge triangle of education, research and innovation and to develop Europe's achievement potential. With the 7th Framework Programme, the EU has taken the first step towards funding modern basic research. The best researchers can make their mark in a Europe-wide competition and receive substantial funding to perform cutting edge research in Europe. For the 8th Framework Programme, there should be an examination of whether competition amongst universities throughout Europe would improve the profile and the visibility of the best academic institutions. Europe must remain the point at which progress in science crystallises.
- #### 4. Effective knowledge sharing
- The Federal Government shares the view of the Commission regarding the importance of effective knowledge transfer and of intellectual property rights. Europe needs common principles for professional knowledge transfer and efficient cooperation between publicly funded research and industry. In spring 2007, the European Council highlighted in the conclusions drawn by the Presidency that there must be better protection of intellectual property rights and control of copying and product piracy worldwide. The development of a European charter for dealing with intellectual property from public research institutions and Universities (the IP charter) makes an important contribution to the development of the European Research Area and to the potential for European innovation in a globalised world.
 - The Council's conclusions of 25th June on the Commission's communication "Improving knowledge transfer between research institutions and industry across Europe: embracing open innovation", and on the German initiative for dealing with intellectual property from public research institutions and universities formed a good starting point for drawing up a European Charter. This was confirmed explicitly in the conclusions of the European Council of 22nd June 2007.
 - The Federal Government is of the view that a charter of this nature should be implemented on a voluntary basis as a European frame of reference. It should be designed for use by every organization responsible for dealing with intellectual property and by the Member States and thus create a basis for improving awareness of the value of intellectual property.
 - The Federal Republic underlines the character of the charter as a joint European declaration on fundamental standards and values in dealing with intellectual property. With a common position of this nature, it will be possible particularly in international joint ventures in research to counteract product piracy and the uncontrolled outflow of expertise, by allowing European research institutions to refer to a uniform and community-wide frame of reference in dealings with their international partners.
 - The Federal Government agrees that the disparate regulations and procedures for managing rights to intellectual property which is acquired in the course of publicly funded work represent an obstacle to a European Research Area (section 3.4.).
 - The Federal Government points out that measures to exchange or allow access to knowledge such as creating online libraries, reservoirs of scientific data or databases for publications and the results of public research, should be in line with the OECD recommendations and guidelines, on which all the OECD states reached agreement in 2007 (Principles and Guidelines for Access to Research Data from Public Funding). These also take into account international and European copyright guidelines such as the seven EU directives governing copyright, which implement or concretise the specifications from international agreements and are in some cases binding, and notably the agreements of the World Intellectual Property Organization (WIPO) on copyright.
 - The Federal Government points out that the grace period is currently the subject of international negotiations.

- The Federal Government also continues to support the Commission in its efforts to create a Community patent and a standard European system for dealing with disputes.
- The Federal Government opposes the mutual international recognition of test and research results from other patent organizations in the patenting process. There are however no objections to increased use and availability of works of this nature for independent testing and research.

5. Well-coordinated research programmes and priorities

- In principle, the Federal Government is open to the request for reciprocal opening of funding programmes in the EU member states. However, opening should comply with the principle of balanced reciprocity in order to avoid undesirable concentration and dilution within the European Research Area. It would also like to note that the development of common principles for funding national and regional research programmes and priorities with a European dimension lies within the remit of the Member States. Further, it stresses that the national research and funding organisations play a key role in their practical organization and basic operation.
- The Federal Government stresses that better coordination of research strategies and programmes on regional, national and European levels would achieve more efficient research. This gives the open method of coordination on a voluntary basis special significance as the key instrument in the further development of the European Research Area.
- For the Federal Government, the coordination of research policies and the research programmes between the Community and the Member States and the Regions is one of the central elements of the European Research Area. The main objectives of the 71 ERA Net projects funded under the 6th Framework Programme were reciprocal exchange, shared analysis and planning joint activities. This represented an important step in achieving closer coordination of national and regional research and development programmes with respect to the structure of the European Research Area. The steady further development of these coordination tools up to the establishment of ERA Net Plus, the joint measures as defined in article 169 EC agreement and the setting up of joint technology initiatives based on article 171 EC agreement is leading to a new dimension in multinational cooperation based on the Framework Programme or European Initiatives such as EUREKA and COST. Based on a comprehensive analysis, there should therefore be a discussion of which measures need to be taken in order to avoid further undesirable fragmentation of the European Research Area, to fine tune the individual instruments and simplify administration on European, national and regional levels. The Open Method of coordination is a key procedure for creating the European Research Area.
- The Federal Government is of the view that in order to develop the ERA further, better use should be made of the experience gained in industry-related initiatives such as EUREKA. EUREKA is extremely important, particularly for cross border research in small and medium-sized companies and for strategic, industry-led research projects. The initiative therefore is highly relevant to innovation and also makes an important contribution to more private investment in R&D, in the context of the 3% Lisbon target. The Federal Government is planning to use its EUREKA presidency in 2009/2010 to increase the potential of industry-related research for building the ERA – particularly and also in view of the contribution of small and medium sized businesses to research and innovation.
- For the Federal Republic, the Research Framework Programme is the key instrument for implementing the European Research Area. The development of the Framework Programme must therefore be a central component of a new concept for the European Research Area. The main aim should be to make the Framework Programme and its existing tools more efficient than hitherto to ensure that research with the Framework Programme is accomplished with a maximum of continuity and flexibility and a minimum of administration. This could start with the mid-term review in 2008.
- The Federal Republic is of the view that the process of integration and flexibilisation of topics and activities already started in the 6th Framework Programme should be continued with a view to the future structure of European research funding. Whilst the subjects on which the Research Framework Programme focuses must remain the job of the programme organizers, who must tailor funding to the research policies and to social conditions in dialogue with experts and programme users, the instrumental design of the individual projects should only be accomplished by the applicants. It must be ensured that measures are meaningfully combined, resources efficiently bundled and duplication of structures avoided. Greater integration of cross-sectional activities into the individual projects would also contribute to further reducing bureaucracy.
- Further, in line with the conclusion of the Council of 25th June 2007¹⁾ the programmes funded from structural and cohesion funds should aim more for investment in knowledge, innovation and research capacities and for better general education and in-job training.
- The Federal Government stresses its commitment of the autonomy of science. This also includes different approaches to quality assurance in research. Setting up the ERC, for example, sets standards which will have the effect of normalising the individual scientific communities. Different areas of research have different cultures, so they should be allowed the leeway to develop their own standards.

¹⁾ CREST report "How to achieve better coordinated use of the Structural Fund and the Framework Programme to support Research and Development".

- The Federal Government is also of the view that accountability should be adapted to the relationships particular to each scientific organisation and conditions in each Member State.
- International research institutions are supported by the interest of the participating organizations. They should remain autonomous.

6. Opening to the world: international cooperation in science and technology

- The Federal Government underscores the high importance that the Commission attributes to international cooperation in research and development for the development of the European Research Area. The Federal government suggests that a strategic dialogue forum on international cooperation e.g. under the umbrella of CREST should be set up for the purpose of drawing up and implementing an internationalisation strategy for the European Research Area.
- There should be a consistent overall framework for cooperation in research and development with third countries in harmony with other areas of policy (education, foreign trade, security, environment, health etc) and which should be deliberately involved in the organization of other community instruments in addition to the Research Framework Programme.
- The Federal Government supports the different strategic forms of international cooperation between different groups of partner countries, whereby it places special emphasis on countries in neighbouring regions on the one hand and on developed industrial countries and dynamic economies on the other. Cooperation with non-associated highly-developed industrial countries and dynamic economies should be focused on strategic areas of research and consistently comply with the reciprocity principle to maintain benefit to both sides. Joint measures should be put in place to solve global problems.
- Mobilising global knowledge for global challenges should be a driving force behind EU research policy. The challenges of climate change, sustainable supplies of energy and resources and the fight against the global spread of infectious diseases require new patterns of cooperation in science and research. With "international dialogue on research" for the coming decade, ministers for research and Chief Science Advisers from the G8 states and the EU Commission have provided the impetus for the establishment of a global forum for dialogue and the inclusion of dynamically developing countries from the start. The agenda of this forum for dialogue includes subjects such as improving conditions for globalised research, development of models for transnational funding and financing, innovative concepts on the subject of human resources (Brain Circulation) and also roadmaps for the development of global research infrastructure. Another area of focus is the development of global structures for governing in areas in which the scientific, economic and politics communities are dependent on internationally coordinated framework conditions, efficient cross border research and implementation of innovations.
- The Federal Government suggests conducting dialogue with Member States and the Commission on how national and Community policies concerning developing countries can be linked more closely with objectives in research policy and achieve coordinated implementation.
- The Federal Government supports the Commission's suggestion of integrating the EU Member States and the Community proactively in multilateral initiatives which address the global and regional problems described above. Europe should take on a leadership role in global fields of research and development cooperation in relevant multilateral organizations and in regional organizations.

III. Priorities for the "new start"

The Federal Government is of the view that the current Green Paper represents an excellent opportunity at a time of political, social and economic change to discuss new perspectives on and approaches to the European Research Area and for the outcome of this discussion to result in a realignment of the ERA concept. The European Research Area should go beyond the Lisbon strategy and further than its role hitherto as a provider of impetus to an innovative Europe. Based on the Green Paper presented by the Commission and in light of the discussion above, the Federal Government sees the following key components in the development of the European Research Area:

- + **Development of a European Charter for the management of intellectual property from public research institutions and universities.**
- + **Foundation of a European Institute of Technology made up of a network of Knowledge and Innovation Communities from all over Europe.**
- + **More efficient use of the Structural Funds for research and development.**
- + **Coordination of the measures taken by the Community and the Member States within and between the areas of education, research and innovation on regional, national and European level.**
- + **Focussed debate on the contribution of modern basic research to the potential for innovation in the European Research Area.**
- + **Publicity for the implementation of the charter for researchers and the code of conduct for the appointment of researchers in research institutions, universities and businesses.**
- + **Joint efforts to realize the "mature" infrastructure projects on the ESFRI roadmap.**
- + **Establish a European forum for strategic dialogue with the Member States and the Commission on international cooperation on research and development and support the establishment of international dialogue on research involving important global partner countries.**



Bundesministerium
für Bildung
und Forschung

Diese Online-Veröffentlichung wird im Rahmen der Öffentlichkeitsarbeit vom Bundesministerium für Bildung und Forschung unentgeltlich veröffentlicht. Sie ist nicht zum gewerblichen Vertrieb bestimmt. Sie darf weder von Parteien noch von Wahlwerberinnen/Wahlwerbern oder Wahlhelferinnen/Wahlhelfern während eines Wahlkampfes zum Zwecke der Wahlwerbung verwendet werden. Dies gilt für Bundestags-, Landtags- und Kommunalwahlen sowie für Wahlen zum Europäischen Parlament. Missbräuchlich ist insbesondere die Verteilung auf Wahlveranstaltungen und an Informationsständen der Parteien sowie das Einlegen, Aufdrucken oder Aufkleben parteipolitischer Informationen oder Werbemittel. Untersagt ist gleichfalls die Weitergabe an Dritte zum Zwecke der Wahlwerbung. Unabhängig davon, wann, auf welchem Weg und in welcher Anzahl diese Schrift der Empfängerin/dem Empfänger zugegangen ist, darf sie auch ohne zeitlichen Bezug zu einer bevorstehenden Wahl nicht in einer Weise verwendet werden, die als Parteinahme der Bundesregierung zugunsten einzelner politischer Gruppen verstanden werden könnte.