

# Lecture 2. What's new in FP6?

FP6 has major new features including major changes to objectives and instruments and significant changes to subjects and IPR.

This lecture briefly outlines the key differences for potential participants:

- ⇒ The European Research Area (ERA)
- ⇒ Instruments and project types
- ⇒ More nations participating
- ⇒ Revised rules
- ⇒ Electronic tools
- ⇒ References

## The European Research Area (ERA)

### Major political decisions affecting EU Research

The following major political objectives and strategies since FP5 have influenced and are reflected in FP6:

- **The 'Lisbon' economic objective**

The Lisbon European Council Summit held on in March 2000 set an objective to 'make the European Union the most competitive and dynamic knowledge-based economy in the world by 2010'. This has since been interpreted as requiring focused community-wide investment in research, and the improvement of innovation and entrepreneurship.

- **The European Research Area**

The European Research Area (ERA) was proposed by the Commission in January 2000. It has since been endorsed by the Heads of State and Government, and is now the major research policy debate in Europe.

Commissioner Philippe Busquin, the architect of the ERA, described it as *"The development, at European level, of an area for the coherent and co-ordinated pursuit of research activities and policies, and an area in which researchers and knowledge move freely will encourage the expression of European excellence in several ways: First, by making it possible to establish a 'critical mass' of potential excellence, by networking the capacities present in different Member States, particularly through intensive use of information and communication technologies. Second, by releasing people and teams from the protection of national barriers, thus introducing competition and increasing the general level of excellence. Third, by attracting to Europe the best researchers from the rest of the world, in the same way that American campuses are currently attracting researchers."*

- **Increasing R&D investment (the Barcelona summit)**

EU Heads of State and Government, when they met in Barcelona in March 2002, agreed the objective of boosting R&D and innovation in the EU by increasing expenditure to approach three per cent of GDP by 2010.

This is an attempt to close the gap between the EU and its major competitors. Two thirds of the new investment in R&D is expected to come from the private sector which invests proportionately less than that in its major global competitor countries.

### We need to have a common EU research effort

Behind the 6th Framework Programme is a different concept that potential participants need to fully understand if they are to be successful.

In the past the European Union has had 15 individual national research programmes all having a similar set of priorities, and the Framework Programmes were in effect a 16th programme. In this situation we suffer duplication of effort and dissipation of resources and we can never talk about 'European' research as a single entity, in the same way that we would talk about American research or Japanese research.

In consequence the EU has agreed at the highest political level to a new concept called the 'European Research Area' (ERA). Just like the opening of trade markets has led to the Single Market, so the opening up of research into a single common area will benefit research generally. But realising this 'European Research Area' is a challenge for the EU, its Member States, and the research community. In respect of the EU, its main instrument of research is the Framework Programmes. Thus FP6 will channel its budget into actions and projects designed to build the ERA in partnership with Europe's best researchers.

## **FP6 as a way to implement the ERA**

Where previous Framework Programmes have been divided into several 'vertical' Programmes around research topics and 'horizontal' Programmes that cut across research areas, FP6 is divided into just two Specific Programmes. The first Programme has two objectives - 'Integrating and Strengthening' the ERA, while the second Programme has the objective 'Structuring' the ERA.

### **The three objectives**

#### **▪ Objective one – Focusing and Integrating Research**

The bulk of expenditure under the sixth framework programme is centred on major research projects that will be structured so as to have an integrating effect on Europe's research resources, resulting in a common endeavour. FP6 research projects require that the partners make a much greater commitment to a permanent structural change.

The research will be focused on specific themes that are strategically important to Europe's future. The themes have been devised in the light of political debate, expert advice, and public consultation. They are not structured from the starting point of traditional research disciplines, but as strategic themes that will be achieved through combinations of scientific disciplines.

The **FP6 priority themes (thematic areas)** are:

- ⇒ Life sciences, genomics and biotechnology for health
- ⇒ Information Society Technologies (IST)
- ⇒ Nanotechnologies and nanosciences, knowledge-based multifunctional materials, and new production processes and devices
- ⇒ Aeronautics and space
- ⇒ Food quality and safety
- ⇒ Sustainable development, global change, and ecosystems
- ⇒ Citizens and governance in a knowledge-based society

Within these thematic priorities are found the objectives of the research itself, so it is here that you must look for the role of your research subject or scientific discipline, once you have understood the overall objectives. The key to relating your discipline to the right theme is to study the Work Programme for each theme.

#### **▪ Objective two - Structuring the European Research Area**

This block of activities seeks to attack the structural weaknesses that affect European research. Although research may often be part of an activity, this objective is not concerned with the research itself, but the environment in which research has to exist. Activities within this programme are applicable to all fields of research and technology.

There are four activities:

- ⇒ Research and innovation
- ⇒ Human resources and mobility (Marie Curie actions)
- ⇒ Research infrastructures
- ⇒ Science and society

▪ **Objective three -Strengthening the European Research Area**

The objective of this action, which is combined with ‘Integrating Research’ into one Programme, is to stimulate the coherent development of research and innovation in Europe by supporting programme coordination and joint actions conducted at national and regional level. Activities may be implemented in any scientific and technological area.

They will take two forms:

- ⇒ Coordination of existing activities
- ⇒ Development of research and innovation policies

## **Instruments and project types**

### **Introducing the concept of instruments**

An ‘instrument’ refers to a politically and legally authorised means of Community financial intervention. These are the different types of projects and actions which will be used to implement proposals selected for funding under FP6. In practice this means the specification of a type of project that can be financially supported.

The type of instruments to be used are always specified in the Work Programme of each activity, and each specific call for proposals will state clearly what instruments are available under that call.

### **The ‘new’ instruments**

▪ **Integrated Project (IP)**

The first, called Integrated Projects, is designed to create the knowledge required to implement the priority thematic areas of FP6, by integrating a critical mass of activities (research, demonstration, training, innovation, management) and resources (staff, skills, competences, finances, infrastructure, equipment, *etc.*).

▪ **Network of Excellence (NoE)**

The second, called Networks of Excellence, is an instrument for directly tackling the fragmentation of research activities in Europe in a given thematic area.

▪ **Article 16**

In addition a third instrument, known as ‘Article 169’, a reference to the treaty establishing the Framework Programmes, is new in the sense that it will be used for the first time. This Article 169 instrument allows the Commission to support the opening and joining of national research programmes of Member States.

### **The ‘traditional’ instruments**

▪ **Specific Targeted Research Project (STREP)**

The ‘shared-cost research projects’ of earlier Framework Programmes are now represented by ‘Specific Targeted Research Projects’, improving existing or developing new products, processes or services or contributing to meet the needs of society or Community policies. These STREPs will have some differences in areas such as contractual and IPR rules.

▪ **Coordination Action (CA)**

Concerted actions and thematic networks have been replaced by 'Coordination actions' which are essentially additional actions intended to promote and support the networking and coordination of research and innovation activities.

- **Specific Support Action (SSA)**

The 'Accompanying Measures' of FP5 have been replaced by 'Specific Support Actions', which are actions the Commission may wish to take in support of the Framework Programme. They can comprise needs studies, input to policy, showcasing research results, seminars, groups, *etc.*

### **Special SME instruments**

For SMEs (Small and Medium-Sized Enterprises) there are now two special forms of project they may use, in addition to the traditional 'collaborative' projects where the partners do the research themselves. Briefly, these are:

- **Cooperative research project (CRAFT)**

In CRAFTs the SME partners commission external research performers (research institute, university, *etc.*) to do the research work.

- **Collective research project**

In collective research projects industrial associations/groupings commission external research performers to carry out research on behalf of large communities of SMEs.

### **Special instruments for mobility and training (Marie Curie actions)**

These actions provide a variety of possibilities for individual researchers in different stages of their career as well as for institutions acting as hosts for these researchers. The Marie-Curie actions typically require transnational mobility, *i.e.* a researcher cannot apply for a fellowship in his/her country of origin or residence.

- **Host-driven actions**

Global grants are given to research organisations and enterprises for the provision of schemes for transnational training and mobility of individuals.

- **Individual-driven actions**

Support to individual researchers with a view to encouraging transnational mobility and to complementing individual competencies, including also return and reintegration mechanisms for researchers from EU and associated countries.

- **Excellence recognition**

Focus on the promotion and recognition of excellence in European research, thereby increasing its visibility and attractiveness.

- **Return and Reintegration Mechanisms**

Will be directed at researchers who have just completed an EU funded mobility scheme (RRG) or to European researchers who have carried out research outside Europe for at least 5 years (IRG).

### **Special instruments for research infrastructures**

These instruments are promoting the development of a fabric of research infrastructures of highest quality and performance in Europe and their optimum use on a European scale. Support is provided for transnational access to major research infrastructures, networking, joint research, design studies, communication network development and construction of new infrastructures.

## **More nations participating**

Participation in FP6 is open to any country in the world, but different modalities for participation and funding apply to different categories of countries.

One major change is the enlargement of the EU. The 3 associated candidate countries (Bulgaria, Romania and Turkey) have full access, including funding and the possibility that the participants could be exclusively from such future Member States. In addition, some other countries are 'associated' to FP6.

The international dimension of the European Research Area is realised by opening the thematic priorities to participation by and funding for institutions from third countries (*i.e.* countries that are neither member states nor associated).

There is also the 'International Cooperation' (INCO) activity, which is specifically aimed at cooperation with certain groups of third countries (Developing countries, Mediterranean Partner Countries, Russia and the other NIS, Western Balkan countries).

A full table of eligibility for participation is given in the Lecture 4 "Preparing to make a proposal".

## Revised rules

FP6, particularly *via* its new instruments, gives more autonomy and flexibility to the consortia themselves. They are expected to manage their own contractual relationships, and to allow for partners to join or leave the consortium during the project life.

Projects are expected to have a 'consortium agreement' that comprehensively specifies the relationship between the partners and how the project will be managed. The Commission is not a party to the consortium agreement. This agreement cannot undermine the conditions of the contract with the Commission, but is complementary to it and specifies the relations between participants in the consortium. For example, access to background IPR can be restricted. The Commission provides a checklist for consortium agreements. For FP6 there is an increased emphasis on planning for the successful exploitation of knowledge. Proposals will have to contain a 'Plan for use and dissemination' to show that the knowledge generated will be taken through to application. This plan will be updated during the life of the project and will replace the FP5 'Technology Implementation Plan' as a deliverable at the end of the project.

The rules on IPR are now more comprehensive and the management of IPR is expected to be part of the project.

## Electronic tools

The Commission follows a policy of making all functions available electronically. Already in earlier Framework programmes, all the information and documentation for participation in the Framework Programmes was available *via* the Internet on CORDIS. In FP6 electronic proposal preparation and submission *via* the Electronic Proposal Submission System (EPSS) is possible and strongly encouraged.

The online EPSS is a Web-based system, *i.e.* proposers do not have to install special software on their computer. Only a standard Web browser and a login and password are required. All data that proposers encode and upload are securely stored on a Web server, so that only the participants in a proposal have access (not even the Commission before submission), providing a common online workspace for the preparation of the proposal.

As an alternative, an offline tool (*i.e.* a special software to be downloaded and installed on proposers' computers) is provided for proposers not wanting to use online proposal preparation and submission.

Also for the preparation of contract negotiation documents (in particular the Contract Preparation Forms) a software is available called CPF editor.

## References

- Sixth Framework Programme of the European Community for research, technological development and demonstration activities, contributing to the creation of the European Research Area and to innovation (2002 to 2006): <http://www.cordis.lu/fp6/find-doc.htm#sp>
- ERA website on CORDIS: <http://www.cordis.lu/era/home.html>
- ERA website on Europa: [http://europa.eu.int/comm/research/era/index\\_en.html](http://europa.eu.int/comm/research/era/index_en.html)
- Classification of the main five FP6 instruments: <http://www.cordis.lu/fp6/find-doc.htm#moni>
- 
- Classification of the main five FP6 instruments (synoptic table): <ftp://ftp.cordis.lu/pub/fp6/docs/synoptic.pdf>
- Classification of the main five FP6 instruments (explanatory annex): [ftp://ftp.cordis.lu/pub/fp6/docs/annex\\_on\\_instruments.pdf](ftp://ftp.cordis.lu/pub/fp6/docs/annex_on_instruments.pdf)
- SME TechWeb: <http://sme.cordis.lu/home/index.cfm>
- Marie Curie actions: <http://www.cordis.lu/fp6/mobility.htm>
- Infrastructures actions: <http://www.cordis.lu/fp6/infrastructures.htm>
- International Cooperation (INCO) website on CORDIS: <http://www.cordis.lu/fp6/inco.htm>
- International Cooperation (INCO) website on Europa: [http://europa.eu.int/comm/research/iscp/index\\_en.html](http://europa.eu.int/comm/research/iscp/index_en.html)
- Booklet “The international dimension of the European Research Area: [http://europa.eu.int/comm/research/iscp/publication/era-int-dimension/index\\_en.html](http://europa.eu.int/comm/research/iscp/publication/era-int-dimension/index_en.html)
- FP6 Rules for Participation: <http://www.cordis.lu/fp6/find-doc.htm#sp>
- FP6 model contract: <http://www.cordis.lu/fp6/find-doc.htm#modelcontracts>
- Working document on cost models: [http://europa.eu.int/comm/research/fp6/working-groups/model-contract/pdf/cost\\_model\\_en.pdf](http://europa.eu.int/comm/research/fp6/working-groups/model-contract/pdf/cost_model_en.pdf)
- Consortium agreement checklist: [http://europa.eu.int/comm/research/fp6/working-groups/model-contract/pdf/checklist\\_en.pdf](http://europa.eu.int/comm/research/fp6/working-groups/model-contract/pdf/checklist_en.pdf)
- IPR-Helpdesk web service: <http://www.cordis.lu/ipr-helpdesk/en/home.html>
- Electronic Proposal Submission System (EPSS): <http://fp6.cordis.lu/fp6/subprop.cfm>
- Contract Preparation Forms (CPF) editor and guidelines: <http://www.cordis.lu/fp6/contract-prep.htm>