# What the Seventh Framework Programme means for Europe

70 billion euros for the next 7 years of European Research. The amount proposed by the European Commission is a worthwhile investment in Europe's future.

Figures already exist showing that European research programmes have an effect on economic and employment growth (see <u>MEMO/05/199</u>). But what is their effect at the level of companies, universities, research institutes? What is Europe risking if it doesn't invest more in European research?

## **Missed opportunities**

A look at the recent past will help to understand why the European Commission considers investing more in research is necessary for Europe's future. In the past, Europe has missed opportunities in key research areas such as nuclear safety, food contamination, Alzheimer, terrestrial biosphere protection and road tunnel safety, simply due to a lack of available funds.

The funding available under FP6 has allowed no more than 15% of all project proposals to be funded, leaving many excellent and innovative projects without funding.

#### Past success

These missed opportunities do not mean that the European research framework programmes have failed. On the contrary, the programmes have substantially contributed to addressing many of society's major challenges in key areas. Some examples of issues where the European scientists have lead ambitious and successful projects include:

- Identification of the function of genes involved in the resistance to diseases
- design of a new large solar parabolic to prepare the energy of the future
- development of a robot with healing hands for stroke patients
- creation of a new kind of filter to remove smoke from the diesel engines

All these achievements were possible through research teams funded by the European research programme.

### Who and what will be funded?

The European Commission, on the basis of the previous framework programme assessments and indicators, estimates that the doubling of the research budget would:

 Create 220.000 new research posts through the participation of Universities and Research Institutes in FP7 funded research projects, compared to 70.000 in FP6.

- Result in more than 20.000 contracts, compared to 7,500-8,500 in FP6.
- Involve over 200.000 participants, compared to 75,000-83,000 in FP6
- Fund 15,000 or more fellowships, compared to 4,500-5,500 in FP6

### More support for SMEs, Europe's potential powerhouse

Small and medium-sized enterprises are a tremendous source of innovation and growth potential for the future. The Seventh Framework Programme seeks to make the most of this potential by proposing measures to increase the participation of SMEs in research projects, and to develop systems for their increased access to research results. There is certainly a will on the part of SMEs to get involved – almost 70% of proposals received from SMEs and evaluated as excellent do not receive funding, due to a lack of resources. Assuming that the average project size remains the same, a doubling of the research budget will allow the direct financing of an additional 500 SMEs every year.

#### Innovation starts here

In its Seventh Framework Programme, the European Commission has proposed a number of innovative instruments, which respond to the challenges faced by those carrying out research in Europe. These include:

A Risk-sharing Finance Facility, to tackle the traditional reluctance of financial institutions to invest in R&D. This new facility will provide a grant from FP7 to the European Investment Bank, to be used to partially cover the risk of lending to R&D projects with a strong European dimension. One euro from the Risk Sharing Finance Facility should allow the EIB to make available up to six euros in loans.

A European Research Council (ERC), which will, for the first time, support directly the basic and fundamental research. This kind of research is the basis for advances in all possible fields of scientific endeavour. It could help to identify the next world-leading technology or paradigm shift in our understanding. The ERC will be based on a high degree of autonomy and integrity, funding the best of European investigator-driven research.

Joint Technology Initiatives, to accelerate the development of major technologies through ambitious pan-European public private partnerships. A first set of initiatives have already been identified in the areas of innovative medicines, nano-electronics, embedded computing systems, hydrogen and fuel cells, aeronautics and air traffic management and global monitoring for environment and security.

See also IP/05/1171 and MEMO/05/335