

Forging a European vision for ICT R&D

The Vienna process



Europe must increase investment and improve coordination, if it is to become a global leader in key ICT research fields. Action is urgent and 2006 was a critical year.

Information and Communication Technologies (ICTs) are essential if Europe is to generate the economic growth and jobs required to fund its social model and protect its environment and quality of life.

These benefits will only be reaped if Europe masters these technologies and understands how to shape their applications.

Unfortunately, the EU spends less than its competitors on ICT research and development (R&D). Moreover, with 25 countries carrying out their own research programmes, fragmentation is an issue.

Europe's multiple strategy

The European Commission is addressing the challenge on multiple fronts:

- **Supporting the i2010 agenda for raising investment in research and innovation**, notably by helping to forge common approaches and new means of supporting ICT research and innovation in Europe, involving European, national, regional and private research activities;
- **Carrying out its own research programmes** to pool Europe's research

EU launched its Seventh Framework Programme for R&D (FP7, see box below);

- **Helping ensure that ICT-based services and products are taken up more widely and used better** to deliver the maximum possible benefits for citizens and businesses, through the EU Competitiveness and Innovation Programme.

Innovation in ICT

Almost 90% of all public ICT research funding in Europe is spent by national and regional research programmes. Together with private funding and EU funding, these have created several centres of ICT research excellence around Europe.

In today's rapidly globalising world, however, new centres of ICT research are appearing, particularly in Asia, within an innovation system that becomes increasingly open.

Moreover, the cost of cutting-edge ICT research is spiralling higher. No single EU country or organisation can today afford to build all the know-how and skills to master these increasingly complex technologies.

Staying at the cutting edge of ICT research means both funding more research and improving its impact, notably through better coordination between European, national, regional and private research programmes.

The Seventh EU Framework Programme for R&D (FP7)

FP7 is the EU's chief instrument for funding scientific research and technological development over the period 2007 to 2013, and so is a key contribution to the EU's re-launched Lisbon strategy. It is designed to build on the achievements of its predecessor, FP6, which was oriented towards the creation of the European Research Area, and carry it further towards the development of the knowledge economy and society in Europe.

resources: in the beginning of 2007, the

Towards a European vision

As part of the i2010 agenda, a process has been put into motion involving the Commission, the Member States and the major industrial and academic stakeholders.

The aim is to improve the coordination of:

- **policies and visions across Europe:** helping identify where Europe should focus and coordinate its efforts;
- **national and European programmes:** working on the 'nuts and bolts' of coordinating national programmes across Europe.

Europe's key players in ICT research - the EU, Member States and industry - must first identify shared visions and strategies before their programmes can be coordinated to create the critical mass of funding required for global leadership. The Commission has created two main groups to identify these visions:

The National IST Directors Forum is an informal forum of national and European decision-makers. It meets to discuss and develop shared visions and strategies for ICT R&D in Europe, to share knowledge and best practice and to improve coordination in ICT R&D in Europe;

The IST Advisory Group (ISTAG), which advises the Commission on its own Framework Programmes, also contributes to vision papers.

In addition, **European Technology Platforms (ETPs)** bring together industrial and academic research communities in specific technology fields to coordinate their research and tailor it to common Strategic Research Agendas. They set out R&D goals, time frames and action plans for technological advances that are relevant to industry and society. Their aim is to mobilise a critical mass of national and European public and private resources.

Other activities supporting the initiative include:

- CISTRANA, which provides access to information on national ICT R&D policies and programmes across Europe;
- FISTERA, which focuses on comparing national ICT R&D foresight exercises and exchanging visions for the future;
- COST, which supports co-operation among scientists and researchers across Europe through the coordination of nationally funded research on a European level;
- EUREKA, which supports pan-European projects and networks on market-oriented, industrial R&D.

European Research Area

Coordination of European, national, regional and private programmes can range from basic information exchange to strategic cooperation and joint initiatives.

Some national funding has been coordinated by several EUREKA Project Clusters and under the intergovernmental COST initiative for many years.

Moreover, since the start of the EU's current Sixth Framework Programme (FP6, 2002-2006), the Commission has launched a number of "ERA-NET projects" to coordinate national research programmes, and a first "Article 169 initiative", where the EU participates in R&D programmes undertaken jointly by several Member States, has been piloted. Some 25 ERA-NET projects coordinate national research programmes in the ICT area.

2006 Timeline

The entire process was given a kick start for 2006 with the "Investing in ICT Research and Innovation" conference in Vienna on 22-23 March.

Bringing together leaders from industry, academia and public policy at both national and European levels, the conference debated ideas, visions and recommendations emerging from the National IST Directors Forum, ISTAG, ETPs and other groups.

The IST 2006 Event in Helsinki on 21-23 November was another important milestone in the process.

FP7

The objective of ICT research under the EU's Seventh Framework Programme (FP7) is to improve the **competitiveness of European industry** – as well as to enable Europe to master and shape the future developments of ICT technologies so that the **demands of its society and economy** are met. The EU Member States have earmarked a total of **€ 9.1 billion for funding ICT** over the duration of FP7.

On 1 February 2007 the European Commission held an information day in Cologne, Germany to present the Work Programme in more detail and help researchers meet each other and form project consortia.

Further Information:

Information Society Research:

http://europa.eu.int/information_society/research/index_en.htm

CORDIS: <http://cordis.europa.eu/fp7/ict/>

CISTRANA: <http://www.cistrana.org/>

FISTERA: <http://fistera.jrc.es/>

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