

EUROPEAN UNION RESEARCH ADVISORY BOARD

The Structural Funds and the Research Component

Proposal on the use of the Structural Funds to support an improved mix of public financing instruments in order to increase the research and development investments according to the Lisbon objectives

<i>Introduction - Context and Mandate of the Working Group</i>	2
<i>Range of activities funded by the Structural Funds in the area of R&D</i>	3
<i>Public and Private funding for R&D may be strengthened by the Structural Funds</i>	4
<i>Programming for the SF at national and regional level</i>	5
<i>Recommendations</i>	5
<i>Background / Community policies on R&D and Cohesion</i>	8

Introduction - Context and Mandate of the Working Group

On the European Commission's request, EURAB (the European Research Advisory Board) set up a Working Group to investigate how best to take advantage of the Community's Structural Funds in pursuing the Union's objectives for Research and Technological Development, as laid down in the Treaties of the European Union.

In adopting the Lisbon Strategy (March 2000) the Union's Heads of State and Government have rooted firmly the continent into the process of building a knowledge based society and economy that could claim to be the most competitive of its kind by year 2010 at world level. In addition, two years later they confirmed that this would primarily happen via raising investment in R&D to reach 3% of the Union's GDP by 2010, two thirds of which should come from the private sector (Barcelona, March 2002).

The European Council has repeatedly backed the policy of building progressively a European Research Area (ERA) that would be an analogy of the concept of an Internal Market for R&D and Innovation in Europe. This encompasses not only objectives defined in the Treaties i.e. advances in S&T terms for strengthening the competitiveness of the European Industry or supporting the other Community policies (such as those dealing with environment, transport or agriculture) but also advances in formulating R&D policy, achieving a higher degree of coordination and increasing overall efficiency of national R&D and innovation systems.

Responding to the Barcelona target, the Commission issued a communication on 4.6.2003 entitled "Investing in research: an action plan for Europe" (COM(2003) 226 final/2). This action plan sets out initiatives required to give Europe a stronger public research base and to make it much more attractive to private investment in research and innovation. Carrying out these actions will allow the European Union to bridge the growing gap in the levels of research investment between Europe and its main trading partners, avoiding putting at risk our long term innovation, growth and employment potential. There are several conditions to satisfy the Barcelona objectives, among others:

- Research investment in Europe should grow at an average rate of 8% every year, shared between a 6% growth rate for public expenditure and a 9% yearly growth rate for private investment;
- More and adequately skilled researchers will be needed in Europe in order to attain the targeted increase of investment in research by 2010. Increased investment in research will raise the demand for researchers: about 1.2 million additional research personnel, including 700 000 additional researchers, are deemed necessary to attain the objective, on top of the expected replacement of the ageing workforce in research.

One of the objectives of the 3% Action Plan was to develop the research and innovation priority as a major axis of the Structural Funds after 2006. This has been achieved at the level of principles: first, in its Guidelines to the Member States in view of the Mid Term review of the Operational Programmes of the Structural Funds (COM 2003 (499 final of 25.08.03) the Commission advised the Member States to take seriously into account the Barcelona objectives for re-orienting their programmes for the remaining period 2004-2006. Second, with the adoption of the Third Cohesion Report on Feb.18, 2004, the Commission suggested that RTD and Innovation becomes one of the most important priorities for the New Structural Funds for the period 2007-2013, covered by the new Financial Perspective.

In an important statement when formulating its opinion on the 3% Action Plan (25.11.03), the Committee of the Regions (CoR) welcomed the Commission's proposals,

but emphasised the need to support basic research, and to differentiate between Framework Programme funding for research and related action by the Structural Funds. While the CoR welcomed the Commission's proposal to use the Structural Funds to remove regional imbalances in research and innovation, infrastructure and training, it emphasised that these funds must be distinguished from measures to promote research. *Whereas "support for research must be contingent on scientific excellence", states the opinion, 'Structural Funds support is needed to achieve synergies'.*

In the same context, the Competitiveness Council in its session of 22 September 2003 invited the Commission and Member States to make more effective use of financing instruments, including the Structural funds, for research and development (R&D).

Using the Structural Funds for Research and Innovation is a complex issue. But it can greatly contribute to stimulate the take up of Barcelona objectives in the Member States and Regions of the enlarged EU. Achieving the 3% targets will necessitate the adoption of new appropriate financial measures, the improvement of the mix of public and private financing instruments and of their effectiveness. It will also mean redirecting public and private spending towards research and innovation. **EURAB proposes herewith a number of options focusing on the future role of the Structural Funds with regard to these objectives.**

Range of activities funded by the Structural Funds in the area of R&D

The Structural Funds (SF) finance productive investment in Europe's regions that would prove to be effective in meeting the objectives of the Union's Cohesion policy, that is, contribute to the harmonious development of the Community by reducing to the minimum regional disparities and help to increase regional competitiveness. As R&D investments fulfil these objectives, there are no major obstacles that these be integrated in national and regional programming objectives, in the Member States' planning and programming documents.

The SF can thus intervene in a wide spectrum of investments in relation to R&D that do not stop at physical infrastructure but can go up to support for businesses activities that link to R&D and Innovation. An indicative, non-exhaustive list of eligible measures in this field could be the following:

- Public and Private R&D Infrastructure (including Science and Technology Parks)
- R&D equipment and instrumentation
- Training of R&D personnel
- Establishment of public and private R&D Institutions, Centres and Services
- Support of Public and Private Partnerships for R&D and Innovation
- Development of the risk capital market, especially for high-tech companies
- Support to creation of technology enterprises (under the limits of the State Aid rules that apply), including actions on SMEs
- Support to activities pertaining to dissemination of R&D results to companies, including support for technology transfer mechanisms, Intellectual Property Rights protection and management, exploitation, marketing and take up.

- Support to regional research and innovation strategies (technology audits and regional foresight, interregional cooperation at European level)

Experience from previous programming exercises of the Structural Funds shows that the most successful implementation and take up of R&D related measures, is to be found in operational programmes implemented in current Objective 2 areas (areas under economic restructuring), followed by programmes that display an integrated approach geared mainly to business competitiveness in the regions (e.g. Competitiveness OP of Greece). In the first case, R&D choices have been instrumental in reorienting the business community to new market directions, while in the latter, extensive integration efforts take place between the academically deployed R&D and an evolving business community, with emphasis to SMEs. **In all cases however, policy makers at national and regional level have to take critical decisions for investing in an area where returns on investment are rather long term and uncertain.**

Public and Private funding for R&D may be strengthened by the Structural Funds

Conventional R&D policies, as well as financial and fiscal R&D policy instruments are important in the run-up to the Lisbon and Barcelona Objectives. However, they are neither sufficient nor unique. In this respect, we need to think of additional measures and policies that are able to influence the output of the R&D systems of the Union (for example in terms of increasing the population of researchers, influencing positively the demand rate for innovative goods and services, and improving national and regional innovation systems). **The Structural Funds, may contribute to measures of this type,** but this would not be an easy task, in the present reality of regional disparities across the Union, which will only get worst following the forthcoming enlargement.

A wide range of policy initiatives to stimulate national / regional innovation systems able to sustain a healthy level of demand for R&D activities, services and products would be needed. At the moment, all available expertise points to inadequate demand levels in many parts of the Union. This affects also demand for researchers which in turns influences training and supply

Therefore it is evident that a good mix of policies is needed, addressing not only the specific R&D related policies per se (i.e. setting national / regional priorities in terms of scientific research areas, catering for human resources, infrastructure and equipment) but also and more importantly financial and fiscal support measures that will be greatly influencing deployment and performance of industrial R&D. These could vary from general macroeconomic policy, competition policy and the regulatory environment to grass-root education policies (all levels). But they have all to come up with a global effect which is to transform the Union in a more attractive place to do business and of course to invest and perform business R&D. Nurturing and boosting the related population of businesses is also a huge task, with a priority one going to young innovative companies.

Identifying the proper policy mix between public and private sector mechanisms is a huge task, tackled at the moment by the Commission services in a number of ongoing expert groups and studies. However it would be essential to boost the capital markets supporting R&D and innovation, together with interventions favouring networking and

exchange of good practice. The 3% Action Plan foresees the establishment of a Mutual Learning Platform for the European Regions that would help promote this last objective. This can have important implications for setting up the new programming efforts of the Union for the next Structural Funds (2007-2013).

Programming for the SF at national and regional level

The Structural Funds function on the basis of programmes designed at national / regional level that may also involve sectoral objectives. It is in this context that the next programming period (2007-2013) will also operate, despite a number of announced changes in the process (that would probably have to do more with a simplification of procedure and a more policy oriented character of programming documents).

Because of the modified geography of Cohesion countries and the overall weight of the Lisbon process, questions related with R&D and Innovation will become central to programming documents. It is therefore crucial for the Commission to link this exercise with the overall implementation of the 3% Action Plan on the one hand and the 7th Framework Programme on the other. National and regional R&D policies will be directly affected from this process.

That makes overall important the way operational programmes will be developed in the Member States and Regions concerned. Planning authorities have to be put in close contact with R&D policy makers from the public and private sector and awareness over the Barcelona objective has to increase, if synergies are to be expected with the Structural Funds.

In this respect it is important to note that the Member States often have the last word in terms of priority setting inside the Operational programmes of the Structural Funds, despite the fact that the Commission has certainly the power to influence a lot the programmes architecture. It would be necessary for the Commission to convince those reticent about the importance of investing in R&D, since in many cases this is a longer term objective. **This last point has to be particularly stressed when setting up evaluation criteria for the new programmes, especially on what is really expected from investment in R&D.**

Recommendations

EURAB¹ wishes to make here a number of recommendations. These must be seen as a suggestion to the Commission with the understanding that the latter will also attempt to

¹ To establish coherence with the existing structures, the **Working Group** had initially considered to propose the creation of a new Fund within the New Structural Funds under the title: "European Regional Research Investment Fund" (ERRIF), an analogue of ERDF, using new resources. The ERRIF would provide support for the creation of infrastructure, productive job-creating investment in research and development; it should be adequate to cover about the half of the required annual growth rate in research investments. The objective of ERRIF would be to support and promote capital investments, but without covering direct research costs, in line with the opinion expressed by the Committee of the Regions.

make sure that appropriate actions are also be adopted at the level of the Member States and Regions, since they are about to play the major role in terms of planning and realising RTDI actions in the context of the Structural Funds.

To increase synergies with Research and Innovation policies, the Structural Funds should focus on the following priority issues, (that comply also with the 3 new Objectives foreseen for the period 2007-2013 (see Annex)):

- **Support to grass-roots R&D infrastructure (university laboratories, equipment, instruments, etc.)** New infrastructure may include buildings, science and technology parks, instrumentation (renewal of existing instrumentation at Universities and Academia deserves in particular appropriate considerations), **databases** (publicly available databases on research and development results, accessible to business [especially SMEs] and academia, would be extremely valuable), **libraries**, etc. Creating large scale regional infrastructures would be an important element to increase cohesion within the ERA, especially in the New Member States
- **Support to regional high speed data networks** between (and within) research establishments including the business sector as well, covering the well-known “last mile” issue. Connecting campuses, universities and research centres with GEANT and its future extensions would be a formidable challenge. This process will also add value to already formed or future Networks of Excellence in the sense of the 6th EU RTD Framework Programme (2002-2006).
- **Support to participation rights to access existing large European RTD infrastructure:** This would be particularly significant for the New Member States. Full-right participation in some cases requires contributing to the cost of the existing infrastructures (“to buy the share”). It is thus strongly recommended that these one-time down-payments should be supported from the Structural Funds.
- **Strengthening, diversifying, and exploring systematically combined support schemes** (different EU funds, national and regional funding, for example focusing on regional incubators for technology based firms).
- **Support to creating One Stop Shops for the regions (especially in new Objective 1 areas):** The Structural Funds could support ‘one stop shops’ (Technology Extension Centres) for each region, building on existing organisations. These centres would provide a range of advanced services to businesses around RTDI themes as well as access to relevant EU support available, EU networks and expertise.
- **Support to transnational / trans-regional cooperation, that proves to be instrumental in the field of Research and Innovation** as past experience has shown (e.g. RIS / RITTS, INTERREG, Innovative Actions, recent DG RTD Pilot Action on “Regions of Knowledge”² etc.)

Creating a new Fund under the Structural Funds, would not be in principle impossible, since there had been similar cases in the past: for example the Cohesion Fund which focuses its action entirely on Environment and Transport related projects in the 4 Cohesion Countries is a good analogy. However, in operational terms it seems quite unrealistic to come up with a new Fund, at a moment when the Commission has been trying hard to streamline existing Funds and simplify existing procedures.

² <http://www.cordis.lu/era/knowreg.htm>

- **Getting the legislation right for the New Structural Funds:** it will be extremely important to translate the will and political orientations to a concrete set of Regulations that will govern the next phase of Structural policies of the Union. In the whole process the role of regional governments (in particular with respect to Research and Innovation issues inside the new Operational Programmes) has to be strengthened.
- **Minimum thresholds for investment in R&D could be set at regional level (for Operational Programmes).** Based on the current levels of investment in R&D in the Operational Programmes overall budgets (approx. at 17 % for current Objective 1 and Objective 2 regions), EURAB recommends raising this to 30% for both type of regions. Appropriate considerations have to be made for those regions that will be hit by the so-call “Statistical effect”.
- **Specific support to SMEs at regional level could take the form of a CRAFT-like measure to help small businesses access better R&D support for their own needs.** The SF could identify local R&D performers that could strengthen response to the R&D needs of local SMEs and provide necessary resources.
- **Achieve better interaction between the EU RTD Framework Programme and the Structural Funds** in terms of synergies and complementarities. Duplication of effort should be also avoided, to optimise resources.

04 April 2004

ANNEX

Background / Community policies on R&D and Cohesion

The regional aspects of R&D policy: In its Communication on the “Regional Dimension of the European Research Area” (COM 549(2001) final) the Commission addressed the role of the regions in the overall ERA building process. It focused on the “motor” role that regions may play in the overall context of economic growth based on research, technology and innovation. It examined in particular how this influences this strategy, namely how to achieve a real European Research policy for the benefit of citizens, achieving results, stimulating development and generating wealth and jobs. In this sense it focused into how this process fits in the overall methodology set up in Lisbon, namely adopting an open method of co-ordination of national efforts together with benchmarking policies, against the target of achieving a knowledge society in Europe. It also examined how to use best the present and future Community research and innovation instruments and last but not least, how to achieve efficient synergies between the Union’s research, innovation and Structural policies.

Many European regions today develop their own research, technological development and innovation policies. These are largely autonomous without being out of step with their national counterparts. They generally involve local leadership, provision of financial and material resources, and priorities aiming at exploiting comparative advantage at regional level. Some particularly successful ones engage in innovative experiments such as cross border RTDI co-operation.

Regional research and innovation activities have a significant influence on the structuring of European research capacity as a whole, for example through the organisation and development of research infrastructure, specialised equipment and facilities; linkages with industrial development zones; development and support of centres of excellence; establishment of science and technology parks; mobility of researchers etc.

Regions which developed such policies in the past, did so to address two objectives: first, to establish a local research and innovation strategy mobilising all available resources and actors; and second, to embark on interregional co-operation schemes, forming networks of various types.

Both approaches have been supported by the Community’s RTD Framework Programme (through the Innovation program) or the Structural Funds through their Programming Document tools.

Such policies point to a new development model for the organisation of European research and innovation systems, which is region-conscious. This involves a targeting of economic development through a systemic mobilisation of all resources available in the regions towards concrete goals, harnessing growth, competitiveness and employment, fostering research, technology and innovation at local or regional level.

Because European regions have very different profiles in terms of economic development, especially in relation to their capacity to generate, absorb and integrate technological innovation and transforming it into economic growth, adopting a single development model would be a mistake. Nevertheless the adherence to some general development principles seems useful, particularly in relation to research and innovation policies.

Regions emerge as dynamic players in developing and structuring the European Research Area. In supporting the transition of the Union to a knowledge based economy, regions may initiate focused efforts, first, by increasing regional awareness of national research and innovation policies and tuning them towards the socioeconomic needs of the regions; and second, directing these policies to build research and innovation capacity in the regions, enhancing their ability to act as drivers for economic and technological development. This may be achieved through:

- Establishing research and innovation strategies to develop material and human resources such as supplying research infrastructure and equipment, local university and training facilities, support structures to foster creation and growth of innovative enterprises, efficient interfaces within the innovation system linking, for example, researchers, innovators and sources of finance, science and technology parks, research programmes, initiatives to attract researchers locally or promote staff exchanges.
- Fostering partnerships between the public and the private sector in order to contribute to the European knowledge-based economy and stimulate knowledge creation and diffusion.
- Promoting an environment conducive to research and innovation, through the introduction of accompanying legal, financial and fiscal conditions, that would prove necessary.
- Stimulating experience exchange with other successful regions in specific fields.
- Contributing actively to an integrated strategy for sustainable development
- Streamlining the efforts of regions in an European Research Area mind-set should have two clear objectives both with a distinct added value for European research and innovation policies : first, to stimulate a better uptake of research results into the local socio-economic fabric (especially vis-à-vis small and medium size enterprises, SMEs) and help translate them faster into economic growth; and second, to increase public and private investment in research and innovation in the regions, thereby stimulating economic and social development.

In the past, interventions to support regional development were mainly based on the provision of capital and support for physical infrastructure. Recent economic research however suggests that upgrading “knowledge” and increasing technology diffusion at regional level may prove one of the most efficient routes for economic growth.

Regional Innovation systems may arise when a number of factors are in “proximity”, perceived mainly in geographical terms, although this is now beginning to change thanks to advances in information and communication technologies¹⁶. Nevertheless, geographical proximity remains one of the most powerful factors in favour of intellectual, commercial and financial exchanges, heavily influencing the innovation process. In this sense regions are important because they form the spatial basis of groupings of research and innovation operators which have come to be known as “clusters”, often considered as the main drivers of regional development.

Clusters are formed by groups of innovative enterprises, academic and research institutions, local development agencies and/or other supporting organisations. Their structures embody a developing knowledge base, enabling infrastructure as well as a cultural dimension.

Clustering is networking at large, with constituent parts developing strong, interdependent links. Interaction flow patterns vary, representing knowledge transfer, financial transactions or simply, increased personal contacts. In such a case, knowledge “spillovers” become ultimately the most important cluster “by-products”. Research and technological development lie at the heart of such knowledge spillovers and form part of the key components of successful regional clusters.

Efficient clustering involves multi-sectoral linkages and organisations with different profiles. In its most successful expression, clustering combines industry, government and nongovernmental organisations, together with a number of knowledge-specific players (universities, research centres, science and technology parks and technopoles, innovation agencies acting like service, competence and diffusion centres).

Of particular importance in the dissemination of results and the process of commercialisation is the interplay with scientific activities and “openness” in terms of exposure to changing markets. University-industry links play here an especially important role. Co-operation between academic spin-offs and their “parent” organisations is often a model of effective regional co-operation. University-industry relations can strengthen the fabric of weaker regions where more traditional industries can turn to universities to investigate and meet their requirements.

Regional disparities of knowledge: The latest versions of the **Report on Economic and Social Cohesion (2001, 2004)** show that significant differences remain at the national and regional levels in terms of technological development and innovation, as well as in terms of human resources. **These trends are also confirmed by the successive editions of the European Innovation Scoreboard, produced by the Commission in line with the Lisbon process of March 2000.** These overall disparities may impede the process of transition of the Union to a knowledge-based economy. Serious efforts have to be targeted on enhancing knowledge diffusion, upgrading human resources and promoting organisational changes that will drive science, technology and innovation efforts further.

These efforts aim on equipping less favoured regions with the appropriate capacity in order that they engage successfully in collaborative research endeavours throughout Europe, achieve a better transfer of research results in their economic fabric, help reducing the existing economic and technological gap with the most advanced regions and thus integrate better in a developing European research space.

Data and analyses indicate that the technology gap between the less favoured regions and those in the Member States where research and innovation related expenditure is highest (Germany, France, Sweden and Finland) has widened rather than narrowed (with the notable exception of Ireland). This technology gap is reflected at the level of the regions.

Disparities in economic performance remain as well as the available capacity to innovate between different parts of Europe, particularly between central and peripheral regions. These differences are also illustrated by the latest available statistics on Science, Technology and Innovation produced by the Commission . These indicators provide useful hints on basic facts that can be further analysed and interpreted. An interesting point for example is that, while there are significant differences among the EU countries, some of the Northern ones score even better than the United States in some domains..

One of the most important gaps between current Objective 1 regions and those located in the rest of the EU Member States, remains business expenditure for RTD and innovation. While this may be partly explained by the reticence of firms in these regions to engage in medium or long term investment in areas that do not promise a secure return, it also indicates a serious bottleneck in terms of developing real players in the knowledge economy. This may also reflect the industrial structure of these regions which is characterised by a prevalence of SMEs. The technological absorption capacity of these regions is thus weakened by a generalised non-participation in the new knowledge flows between the main RTD operators. This is also linked to the technological absorption capacity of the human resources present in the region and to the development of appropriate capital markets for innovation (notably venture capital).

Facilitating Objective 1 regions to take part effectively in collaborative research projects at national or European level, develop their human S&T resources, take more advantage of the opportunities offered by venture capital provision and thus integrate faster at the European research community, remain primary targets of Community policy.

Strengthening Community's R&D and Innovation Policy through the Structural Funds

Solidarity among the peoples of the European Union, economic and social progress and reinforced cohesion form part of the Community's overall objectives of "reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions", as laid down in the Treaty establishing the European Communities. The instruments of solidarity, the Structural Funds and the Cohesion Fund, cover currently about one third of the EU budget (some €36 billion in 2004). The resources are delivered through **multi-annual development programmes, managed jointly by the Member States, the regions and the Commission**. In contrast with the Community's RTD policy, these programmes are based on a public-private partnership principle in which the Commission contributes together with the Member States and the Regional Authorities. Resources are pre-allocated based on a system of national quotas (No competition foreseen, no evaluation as we know it in the Framework Programme). However, for each Operational Programme, ex-ante and ex-post evaluation exercises are carried in full.

The Structural Funds and the Cohesion Fund are part of the Community's Structural policy, which is intended to narrow the gaps in development among the regions and Member States of the European Union. The Funds participate fully, therefore, in pursuing the goal of economic and social cohesion, written down in the EU Treaty.

There are currently (2000-2006) four (4) Structural Funds:

(i) **The European Regional Development Fund (ERDF)**, set up in 1975, is the largest of these. It provides support for the creation of infrastructure, productive job-creating investment, mainly for businesses, and local development projects.

(ii) **The European Social Fund (ESF)**, set up in 1958, contributes to the integration into working life of the unemployed and disadvantaged sections of the population, mainly by funding training measures.

(iii) **The European Agricultural Guidance and Guarantee Fund (EAGGF)**, also set up in 1958 as a financing tool for the common agricultural policy, has two sections: a "Guidance and orientation" section providing support for rural development and aid for farmers established in areas lagging behind in their development. The "Guarantee" section finances common market organisations along with rural development measures in other parts of the Community;

(iv) **The Financial Instrument for Fisheries Guidance (FIFG)** was created in 1993. It seeks to adjust and modernise equipment and material in the sector and to diversify the economies of areas dependent on fishing.

(v) **The Cohesion Fund that was** set up with the Maastricht Treaty and became operational in 1993 is not part of the mainstream Structural Funds. It finances focused projects, designed to improve the **environment** and develop **transport infrastructure** in Member States whose per capita GNP is below 90% of the Community average. In this way it contributes to sustainable development in the Member States concerned as well as

strengthening cohesion in the European Union. The Cohesion Fund budget for 2000-06 amounts to EUR 18 billion.

In order to improve the effectiveness of Community action during the period 2000 -2006, the Commission Communication “Agenda 2000” proposed an extensive reform of the structural policy whose financial implications were established at the Berlin European Council in 1999. This reform increased the concentration of assistance and simplified the procedures for its allocation and management by reducing the number of priority objectives to three:

(a) **(Current) Objective 1** contributes to the development and structural adjustment of the regions whose development is lagging behind and which have a per capita GDP of less than 75% of the Community average;

(b) **(Current) Objective 2** supports the economic and social conversion of areas with structural difficulties such as those undergoing economic change, declining rural areas and areas dependent on fishing, problem urban areas, and geographical areas with serious natural or demographic handicaps;

(c) **(Current) Objective 3** supports the adjustment and modernisation of policies and systems of education, training and employment for regions outside the regions eligible for Objective 1.

In what concerns R&D and Innovation, initially, Structural Funds activities in less favoured regions (LFR) were concentrated on physical infrastructure. This was essential to build capacity in terms of laboratories and equipment. Today, despite the fact that critical infrastructures are still important for enabling the transition to a knowledge-based society and economy (for example the availability of modern telecommunications and data networks), the growing importance of intangible investments in education, training, research and innovation priorities is widely acknowledged.

During the 1990's, some EUR 12 Billion were allocated to LFR in terms of RTD-related investments. **An amount close to EUR 10 Billion is earmarked for R&D and Innovation for the period 2000-2006,** and the promotion of research, innovation and the information society is clearly understood as a priority. **In their guidelines, based on broad principles of identification of integrated strategies for development as well as of the establishment of a decentralised and wide-ranging partnership, the Structural Funds encourage regions to undertake actions on innovation promotion strategies, on building partnerships between universities and industry and on developing specific RTDI skills in terms of human resources.**

Thus the overall amounts spent on the one hand by the Structural Funds and on the other hand by the Framework Programme for RTD are close to the same order of magnitude, but it is important to understand the difference in focus between these instruments. Put in global terms, the Structural Funds supported research capacity building in the regions focusing on the material conditions of the research environment, while the Community RTD Framework Programmes supported transnational research projects built on scientific and technological excellence with a specific socioeconomic impact. As Commissioner Barnier, responsible for Regional Policy and Institutional Reform once put it, “In terms of Research and Innovation, the Framework Programme funds content (*contenu*) while Regional policy funds the underlying containing structures (*contenant* in FR).

Delivery modes are also entirely different: the Framework Programme for R&D is based on competitive calls for proposals aiming to select the best projects that are

submitted directly by transnational consortia by universities, research centres and businesses. This is a highly selective process, based only on Scientific Excellence with no cohesion criteria for the selection process. For their part, the Structural Funds, operate in a partnership mode between the Commission and the Member States, where national quotas based on indicators apply for the allocation of funds: multiannual programming is used for designing and performing activities, which stay largely the sole responsibility of the Member States. In the Structural Funds jargon, Programmes are composed by Measures that set the scene for the overall activities foreseen in a specific sector / activity. Measures are then implemented through Projects that in most cases are implemented through Public Procurement. In most cases these Projects are purely national (and of course, regional).

The programming exercise for Structural Funds activity 2000-2006 reveals a strong weight devoted to RTDI and the information society as a central axis in development plans especially for Objective 1 regions. The role of RTDI and the information society as structural factors for competitiveness and thus in long-term economic growth is translated into integrated strategies for innovation and for interaction between universities, research centres and the enterprise sector, as well as to support international integration. Information Society Technology research services and applications for SMEs form an important part of this activity. It is clearly visible that many regional strategies already take due account of the policies for realising the ERA and intend to make use of the new possibilities in this respect, thus playing an active role within the given frameworks.

The Innovative Actions: Since 1994, **Regional Innovation Strategies (RIS)**, under the European Regional Development Fund (ERDF), as well as **Regional Innovation and Technology Transfer Strategies (RITTS)**, under the third activity of the fourth and fifth Community RTD Framework Programmes, have served as policy tools for developing innovative capacity in the regions.

Originally introduced as **Regional Technology Plans** for eight European regions, the concept has since been widely applied. **There are currently more than 100 regions in Europe that have participated in the RIS/RITTS schemes.** In 1998 the concept was further developed by the Commission through the “**RIS+**” initiative, aiming to ensure that the work begun under the RITTS/RIS projects moves beyond the strategic framework for action towards a concrete implementation of new measures and projects.

The objectives have been to stimulate regional innovative activity and capacity through a process of consensus-building among the key actors. Strategy development and exchange of best practices remain key. Further developments include the **Transregional Innovation Projects** and the **Transnational Innovation Strategy Projects** under the 5th Community RTD Framework Programme, aiming to encourage the transfer of experience from RIS/RITTS regions to partners in the accession countries. **To encourage networking between the regions involved, the Commission also contributes to the funding of the Innovating Regions in Europe Network.**

Evaluations show that the RIS/RITTS approach has been an important tool in increasing regional innovation policy capacity by creating new regional partnerships and joint working methods and by launching new innovation projects within firms. The partnerships and the strategies formulated within the RIS projects have had a strong policy impact, not least through their inclusion in broader regional economic strategies **(that in turn have provided the basis for the formulation of many Structural Funds program proposals for the period 2000-2006).**

A similar initiative on a smaller scale is the **Regional Information Society Initiatives (RISI)** jointly funded under Article 10 of the European Regional Development Fund and

Article 6 of the European Social Fund. The essential idea has been to assist less favoured regions in making the Information Society concept an integral part of regional development and employment policies. The main objectives of RISI were to develop consensus and partnership amongst key regional players around a **Regional Information Society Strategy** and to promote the commitment and co-operation of the key players in order to develop a Regional Action Plan.

Cross-border regional co-operation has been a major theme of the EU Structural policies for many years in the form of the **INTERREG** part of Community initiatives. These schemes continue in the medium term. **INTERREG III (2000-2006) has three strands, two of which address RTDI related activities.**

In the area of innovation on human resources development, regions have received support under Article 6 of the **European Social Fund** in order to develop their capacity in promoting business innovation, competitiveness and entrepreneurship. In addition, the regional capacity for innovation has been enhanced through activities conducted under further Community pilot programmes dedicated to employment, human resource and local development.

In order to raise the impact and the qualitative aspects of regional development initiatives the Commission has set to support novel ideas which would provide regions with real innovative approaches. Thus the so called **Innovative Actions** were introduced, with a view to develop new methodological concepts for regional policy, building on models and schemes of the knowledge economy.

The guidelines for the new Innovative Actions (2000-2006) under the European Regional Development Fund (ERDF) were adopted by the Commission in January 2001 and the respective Call for proposals was launched with a deadline set for end of May each year until 2005. The aim of this activity is to initiate innovative practices to improve structural interventions co-funded by ERDF in current Objective 1 and 2 regions. Their total budget is approximately EUR 400 million of which 94% is destined for co-financing regional programmes of innovative actions as well as projects deriving from these programmes, while 6% is devoted to the organisation of competitions of best projects deriving from a regional program, as well as networking and exchange of experience between regions respectively. Networks are foreseen to be of thematic as well as geographical nature. Proposals are submitted directly by the competent Regional Authorities. 143 of the 156 eligible regions submitted already proposals for regional programmes, and 126 programmes are already approved for a total of EUR 312 Million ERDF support.

There are three themes in the Innovative Actions, of which the first one (Regional Economies based on Knowledge and Technological Innovation) is particularly significant for the accomplishment of the objectives of the European Research Area. This theme aims to enable regions to build competitiveness based on the creation of regional research and innovation systems. To achieve this, regions are encouraged to formulate regional programmes with the objective of increasing and reinforcing the co-operation and interaction between public research and the business community. RTD related guidelines in the Innovative Actions cover the following eligible activities for co-financing :

- Creation or reinforcement of co-operation networks between firms or groups of firms, research centres and universities, organisations responsible for improving the quality of human resources, financial institutions and specialist consultants, etc.;
- Staff exchanges between research centres, universities and firms, particularly SMEs;

- Dissemination of research results and technological adaptation within SMEs;
- Establishment of technological strategies for the regions, including pilot projects;
- Support for incubators for new enterprises with links to universities and research centres; encouragement for spin-offs from university centres or large companies oriented towards innovation and technology;
- Schemes for assisting science and technology projects carried out jointly by SMEs, universities and research centres;
- Contribution to the development of new financial instruments (venture capital) for business start-ups.

In defining the above guidelines, the Commission has considered the overall European Research Area strategy as a priority concept, to which the new Innovative Actions fully adhere. Their scope underlines the importance of creating synergies between regional and research and innovation policies.

Combining forces: towards greater synergy between Regional and Research and Innovation policies in an enlarged Europe

In presenting on 18/02/04 the *Third Report on economic and social cohesion* which sets out its vision for cohesion policy in an enlarged Union for the period 2007-2013, the Commission has made a step further for building and advancing on the Lisbon agenda, which in this case is coupled with the Gothenburg one on Sustainable Development. The proposals follow those on the Union's future budget (Financial Perspective) which included a €336 billion package for what is coined as "*cohesion policy*" which has to be more correctly read as "*Regional Policy*", although this last term does not do justice to the second big Structural Fund (The European Social Fund) concerned about the European Employment Strategy (Training / Employment promotion programmes).

The report contains major recommendations on how Community resources should be used in order to narrow the economic gaps between Europe's regions and therefore achieve growth and sustainable development. The report marks the kick-off of an important strategic and policy planning cycle that will involve the European Institutions as well as the Member States, and is expected to produce the legislative documents (Regulations) that will govern implementation and delivery of the Next Structural Funds for the 2007-2013 period.

The Commission proposes a new architecture for EU cohesion policy, which is organised around three main *new* priorities (alias *Objectives*):

- **New Objective 1: Convergence: supporting growth and job creation in the least developed Member states and regions.** First and foremost, this objective would concern those regions with per capita GDP less than 75% of the Community average. At the same time, temporary support is proposed for regions where per capita GDP would have been below 75% of the Community average for EU15 if enlargement had not happened (the so called statistical effect). The European Regional Development Fund (ERDF) will contribute to this Objective, mainly on modernising and diversifying the economic structure, extending and upgrading basic infrastructure, protecting the environment, **reinforcing the knowledge economy**, improving administrative capacity, improving the quality of labour market institutions, education and training systems and increasing human capital would be the major issues of co-financing of national and regional programmes.

- In addition, those Member States whose Gross National Product is below 90% of the Community average will be eligible for the Cohesion Fund. This will continue to finance transport and environmental programmes (as it was the case in the current programming period).
- **New Objective 2: Regional competitiveness and employment: anticipating and promoting change.** The key objective of cohesion policy outside the least favoured Member states and regions would be twofold: First, through **regional programmes**, cohesion policy would help regions and the regional authorities to anticipate and promote economic change in industrial, urban and rural areas by strengthening their competitiveness and attractiveness, taking into account existing economic, social and territorial disparities. Second, through **national programmes**, cohesion policy would help people to anticipate and to adapt to economic change, in line with the policy priorities of the European Employment Strategy (EES) by supporting policies aiming at full employment, improving quality and productivity at work, and social inclusion.
- **New Objective 3: European territorial cooperation: promoting the harmonious and balanced development of the Union territory.** Building on the experience of the INTERREG Initiative, the report recommends the continuation of action to promote the harmonious and balanced integration of the Union's territory by supporting co-operation at cross-border and transnational level. In principle, all regions along the external and internal borders, terrestrial as well as maritime would be concerned by cross-border co-operation. The key aim is to provide joint solutions to common problems between neighbouring authorities, such as urban, rural and coastal development and development of economic relations and networking of small and medium-sized enterprises.

The key principles of the delivery system for cohesion policy will be maintained such as **strategic planning, decentralised management, systematic monitoring and evaluation**.

However the report proposes *important changes*, including a new dialogue with the Council to help ensure that cohesion policy **is adjusted to the priorities set out under the Lisbon and Gothenburg (sustainable development) agendas**.

In a completely new development based on the principle of Open Method of Coordination, each year, the European Institutions would examine progress on the strategic priorities and results achieved on the basis of a report by the Commission summarising Member States' progress reports.

In terms of financial resources for the period 2007-2013, it is proposed to allocate €36.3 billion or 0.41% of the Union's Gross National Income (GNI) in support of cohesion (0.46% before the transfers to the rural and fisheries instruments). FEOGA / **EAGGF and IFOP (fisheries)** will also cease to be part of the Structural Funds. There will be no new Innovative Actions separate initiative, as all such initiatives are integrated in the mainstream operational programmes. Programmes will be also "Monofonds", that is, funded only by one single fund (either the ERDF or the ESF, but no longer a combination of the two).

R&D and Innovation inside the New Structural Funds. Consistent with the Lisbon agenda the 3 new Objectives reserve a prominent place for RTD and Innovation. Thus:

- **for New Objective 1**, support by the ERDF is foreseen for: modernising and diversifying the economic structure of Member States and regions, with particular attention to innovation and enterprise, notably by creating closer links between

research institutes and industry, favouring access to and use of information and communication technologies (ICTs), developing conditions favourable to R&D, improving access to finance and know-how and encouraging new business ventures;

- at the same time the Cohesion Fund (a separate one) will provide support for trans-European transport networks, in particular, the projects of European interest, and environment infrastructures would remain the central priorities. In order to reach an appropriate balance to reflect the particular needs of new Member States, it is envisaged also to support projects such as rail, maritime, inland waterways, and multimodal transport programmes outside the TEN-T, sustainable urban transport and environmentally important investments in the key fields of energy efficiency or renewable energies. **Important synergies with DG RTD Environmental Technologies Action Plan (ETAP³) may be established here.**
- **for New Objective 2**, support is foreseen by the ERDF for: (a) Promoting innovation and R&D, inter alia, by reinforcing the links of SMEs with the knowledge base, supporting networks and clusters, or enhancing SMEs access to advanced technologies and innovation business services. (b) Promoting entrepreneurship, by, inter alia, supporting the creation of new firms from universities and existing firms, or setting up new financial instruments and incubating facilities.
- **for New Objective 3**, things are more complex, as several sorts of territorial cooperation are foreseen:
 - first type is cross-border cooperation for neighbouring regions
 - second type is trans-national cooperation based on the current (or future modified 13 INTERREG regions – spanning across MS and including non MS as well)
 - third type is the one introduced by the New Neighbourhood Instrument (NNI) targeting the external border regions of the Union
 - fourth type would be the trans-regional cooperation inside the Union, independently of proximity. This one looks restrained.

Building on the experience of the present INTERREG Initiative, the Commission proposes to create a new objective dedicated to further the harmonious and balanced integration of the territory of the Union by supporting co-operation between its different components on issues of Community importance at cross-border, transnational and interregional level. Action would be financed by the ERDF and would focus on integrated programmes managed by a single authority in pursuit of key Community priorities linked to the Lisbon and Gothenburg agendas. In principle, all regions (defined at NUTS III) along the external and internal borders, terrestrial as well as maritime would be concerned by cross-border co-operation. The aim would be to promote joint solutions to common problems between neighbouring authorities, such as urban, rural and coastal development and development of economic relations and networking of SMEs.

³<http://europa.eu.int/comm/environment/etap/etap.htm>;
http://europa.eu.int/comm/research/environment/etap_en.html

In this context, the Commission intends to propose a new legal instrument in the form of a European co-operation structure (“**Cross-border regional authority**”), in order to allow Member States, regions and local authorities to address – both inside and outside Community programmes – the traditional legal and administrative problems encountered in the management of cross-border programmes and projects. The aim would be to transfer to this new legal structure the capacity to carry out cooperation activities on behalf of public authorities.

In order to allow more effective actions on the external borders of the enlarged Union, the Commission will set up a New Neighbourhood Instrument (NNI) in the context of the European Neighbourhood Strategy. The NNI would operate on both sides of the external border, including where appropriate maritime borders. The NNI will promote, inter alia, sustainable economic and social development, and build on past experience of cross-border cooperation, in particular partnership, multi-annual programming and co-financing.

As far as the broader actions to promote transnational co-operation is concerned, the lessons should be drawn from current experience. In particular, Member States and regions would be invited to assess the usefulness and effectiveness of the existing 13 transnational cooperation zones (defined under INTERREG IIIB) in the light of enlargement. The objective would be to decide together with the Commission on a number of zones for transnational cooperation which are sufficiently coherent and where there are common interests and opportunities to be developed. It is envisaged that such cooperation would focus on strategic priorities with a transnational character such as R&D, information society, environment, risk prevention and integrated water management.

Finally, the Commission proposes that regions should in future incorporate actions in the field of interregional cooperation within their regional programmes. To achieve this, regional programmes would need to dedicate a certain amount of resources to exchanges, cooperation and networking with regions in other Member States. In addition, the Commission would seek to facilitate exchanges of experience and good practices on a European scale by organising networks involving regions and cities.
