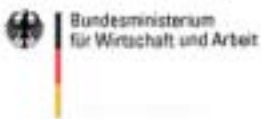
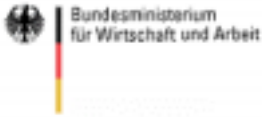


# Towards An Innovative Europe

A paper by the French, German and UK Governments

20 February 2004





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20 February 2004

Dear Commissioners Liikanen, Busquin and Solbes Mira  
Dear Charlie McCreevy  
Dear Mary Harney

Europe's ability to translate promising research into innovation is a crucial driver of progress towards the Lisbon goals, helping to secure stronger productivity growth over the longer term. Innovation is also central to our efforts to address the social and environmental challenges of the future, in health, welfare and sustainable development. We therefore welcome the work of the Commission in this area, including its intention to prepare a new Action Plan to help raise levels of innovation across Europe.

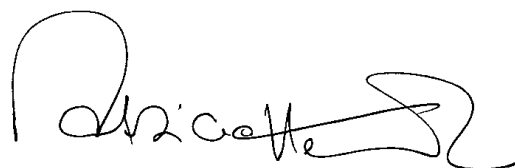
Germany, France and the UK have recently worked together to share experience in seeking to tackle the barriers to innovation in our economies and to identify the range of actions needed to realise Europe's innovative potential. The attached paper sets out the conclusions of our work. It suggests that action is needed at the national and European level to strengthen intellectual property regimes, raise levels of scientific knowledge and skills, reduce the regulatory burden faced by young and innovative companies, strengthen the links between science and industry, improve access to finance and secure greater value from existing sources of EU research funding. We very much hope that you find our analysis helpful and that our conclusions may be reflected in ongoing Commission work in this area.

We are circulating this letter and enclosed paper to ECOFIN and Competitiveness Council colleagues.

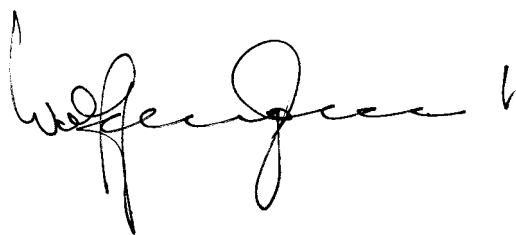
Yours sincerely,



**Gordon Brown**



**Patricia Hewitt**



**Wolfgang Clement**



**Edelgard Bulmahn**



**Francis Mer**



**Claudie Haigneré**

# **TOWARDS AN INNOVATIVE EUROPE**

**A paper by the French, German and UK Governments**

## **Introduction**

Improving innovation performance is central to the Lisbon goal for the EU to become the most competitive and dynamic knowledge-based economy in the world by the end of the decade.

Productivity growth - key to the success of the Lisbon strategy - relies on a continual stream of inventions and innovation in new technologies and improved working practices. Through innovation, businesses can introduce new products to their consumers and deliver higher quality and better value outputs; in doing so, they secure valuable competitive advantage in an increasingly global economy. Innovation can also help to address the social and environmental challenges of the future, in health, welfare and sustainable development.

However, many European countries fail to translate promising research into innovation. The innovation performance of the Union remains relatively poor in comparison with that of major international competitors such as the US or Japan. In addition, it is with great concern that we observe tendencies in our industry to shift R&D activities outside the EU.

The 2003 European Innovation Scoreboard shows the EU trailing the US on 10 of the 11 indicators available for both countries, particularly in patenting, but also in business and public expenditure on research and development (R&D), tertiary education, and the provision of early-stage venture capital. The Scoreboard also suggests that, on current trends, none of the gaps will be closed by 2010 without additional effort.

Additional effort need not automatically imply additional spending, however. Consideration must also be given to improving the effectiveness of current spending and removing barriers to the effective exploitation of research. Effective innovation systems depend on a range of factors. France, Germany and the UK support Europe's aspiration to raise R&D investment towards 3 per cent of GDP. Though crucial, increasing R&D expenditure is by itself insufficient. The social and economic potential of new discoveries will only be

realised if they can be effectively translated into innovation – new products, processes and services – and successfully diffused throughout the economy.

This requires framework conditions that provide firms with both the incentives to invest in R&D and the ability to reap the rewards of their investment. These conditions include a stable macroeconomic environment, open and competitive product, labour and capital markets, sensitively designed regulation, a favourable tax climate, and a responsive intellectual property regime. A skilled workforce is also required, along with strong links connecting the research base with developments in market demand as well as social and environmental needs.

### **Current barriers to innovation**

The 2002 ECOFIN report on research and development<sup>1</sup> emphasised the importance of ensuring supportive framework conditions for innovation to thrive. It also identified several key barriers to innovation in the EU, including:

- €# ineffective intellectual property regimes;
- €# weak science-industry links and insufficient exploitation of public research;
- €# a lack of risk capital, particularly at the early stage;
- €# the regulatory burden for start ups, and punitive bankruptcy laws.

Building on these priorities, this non-paper details actions at Community level that must be priorities for boosting innovation, especially through the forthcoming Innovation Action Plan. In taking these actions forward it is important to acknowledge that the needs and capabilities of Member States in innovation vary considerably, a point taken up in the April 2003 R&D Action Plan and other recent literature.<sup>2</sup> We must preserve competences for Member States to set policies that are most appropriate to their own economic conditions and models whilst promoting the sharing of best practice among Member States and also with Accession Countries.

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<sup>1</sup> *Report on Research and Development*, Working Group on Research and Development, EPC/ECFIN/01/777-EN final, Jan 2002.

<sup>2</sup> *Investing in research: an action plan for Europe*, COM (2003) 226 final/2, April 2003; *Raising EU R&D intensity: improving the effectiveness of the mix of public support mechanisms for private sector research and development*, Report to the European Commission by an Independent Expert Group, 2003.

## **Priorities for Action**

### Innovation Action Plan

**Regulation.** Regulation can both provide incentives for and inhibit innovation. Improving the regulatory framework is therefore a key element of efforts to boost innovation in the EU.

€# *The Commission and Member States must strengthen the impact assessment systems for new regulation, set clear goals for improving and better methods for assessing the quality of the regulatory framework and make greater use of alternatives to regulation. The Commission should work on a clear timetable and targets to reduce regulation which unnecessarily hinders innovation and economic performance. Where regulation is necessary, the EU should aim to produce outcome-based regulation, building on the principles of the New Approach.*

**Intellectual property.** Intellectual property rights underpin innovation by providing a means for innovators to make a return on their investments, whether these are based on scientific, technological or artistic creativity. It is therefore crucial to ensure that current and future innovators have an appropriate understanding of IP. Given its importance for innovation, it is essential that the IP framework is developed so as to provide a balanced and effective tool to support innovation.

€# *Building on the proposals in the R&D Action Plan, the Commission and Member States should take action to raise awareness of IP amongst business and academic communities, and in particular to ensure that national and European systems deliver a range of IP information, registration and enforcement services responsive to the needs of business. To this end, information on Community regulation should be spread to all relevant agencies in the Member States.*

€# *The Commission, Parliament and Member States must work together on legislative actions to support and clarify the IP framework – including the enforcement directive, the computer-implemented inventions directive, and the Community patent – ensuring that the outcomes strike the right balance between the needs of business and consumers. Translation costs of the Community patent must be limited. Only in cases of good faith can a translation have a limited effect, taking account of exceptional circumstances. Patent holders, especially SMEs, need a reasonable period*

*of time for the translation work. The aim should be to reach a political agreement on the enforcement directive, on the computer–implemented inventions directive and the Community patent as soon as possible.*

€# *The Commission, Council and Member States must ensure that competition is strong throughout the EU and that competition policy is combined as effectively as possible with interventions to target other market failures. In particular, the Commission should ensure that the application of competition policy does not inadvertently inhibit the dissemination of innovative ideas through intellectual property sharing agreements between companies. The Commission should work further with stakeholders on its proposal for a Technology Transfer Block Exemption Regulation, to ensure that it reflects best practice in the fields of innovation and competition.*

**Access to finance.** The provision of early stage venture capital in the EU is still low in comparison with the US. In particular, attracting private finance for early stage technology development, such as proof-of-concept activity and technology transfer, is extremely difficult, requiring relatively small investments, but with a high-risk profile. At the other end of the spectrum, fragmentation of the European capital markets for companies seeking to raise equity through an initial public offering continues to inhibit the efficient operation of the private equity and venture capital markets.

€# *The Commission and Member States must continue to take steps to allow for the integration of financial services markets in the EU in a manner which respects the diversity of regulatory approaches, the variety of financial markets, and the needs of companies seeking capital for investment.*

€# *The Commission and Member States should also examine the prospects for more specialised financing instruments to support early stage technology development, perhaps linking to the European Initiative for Growth.*

**State aids.** The modernisation of the state aids framework is necessary to obtain a more efficient and simplified instrument both for controlling state aid effects on competition and enhancing expenditure. Targeted state aid can play an important role in leading to better productivity outcomes, and allow Member states to face global competition. Revised state aid regulations should underpin Member States` abilities to fund R&D on an appropriate level. In particular, we must look at how public spending can be most effectively directed towards

market failures and have a greater impact in levering in private funding of R&D, whilst retaining sufficient restraint on the levels of aid granted by Member States so that the proposals on reorientation and reduction of state aid arising from the Stockholm Council are not undermined.

⌘ *The Commission must review the state aids framework to ensure that the R&D and venture capital guidelines are properly designed to allow the Member states to address the market failures that inhibit innovation. This review should be undertaken in close consultation with the Member States to have a new state aid regulation come into effect by mid 2005. The Commission should provide a provisional schedule.*

⌘ *Within this review the Commission should examine whether the difficulties faced by young innovative companies (SMEs engaged in R&D) constitute a special type of market failure, and, given the special role they play in economic growth, consider if it is necessary to take further steps to address this explicitly in the guidelines. The Commission should examine the possibility of considering higher funding intensities for the smallest SMEs (up to 10 employees).*

⌘ *The Commission should ensure that public support for long-term research with more risks will be eligible for appropriate levels of support under the new state aids framework, including where undertaken by universities and research institutions.*

**Skills.** If Europe is to improve its innovation performance, it is critical for companies to be able to absorb new knowledge and turn it into action; the education systems of Europe must therefore be able to provide the skills required by innovative businesses. More young people must be attracted to take up science courses, to start professional careers in science and be willing to work in different institutions and countries.

⌘ *The Commission and Member States must ensure that the skills needs of high-tech and innovative businesses are given a high priority in national and EU-level education and training strategies, and are embedded in the delivery of other relevant programmes such as the Framework Programme for European research.*

€# *The Commission and Member States must increase their efforts to popularise scientific activities and to support the mobility of young people.*

**Knowledge transfer and collaboration.** Given that firms rely on a variety of knowledge sources as inputs to the innovation process, developing strong networks and collaboration plays an important role in promoting innovation, particularly links between business and universities.

€# *The Commission and Member States should consider how to build better links between business and universities/research institutions, for example through partnership schemes encouraging young graduates to take innovative ideas into business, including international business-university/research networks.*

**Innovation in industry and the service sector.** Innovation is important in all sectors of industry, not only in high-tech industry. Indeed, many innovative processes play a key role in the creation and growth of businesses. For example design and creativity, but also innovative organisation, marketing, management, and logistics are very important factors but often neglected in policy making, even if they may need special support.

Significant barriers to service providers, especially SMEs, remain in the way of an efficient and competitive market for services in the EU. Increased competition in the services sector has the potential to act as a catalyst for the innovation of service products and for the exchange of best practice in a sector which also provides considerable inputs to the manufacturing sector.

€# *The Commission and Member States should recognise the considerable benefits to be derived from an efficiently-working service sector in the EU and take the opportunity of the Commission's recent proposal to act decisively in this area.*

Furthermore, skilled personnel in the services sector often not only hold a company's most valuable knowledge but also are a crucial means of absorbing new knowledge from elsewhere; more transparent and robust information on the value of intangible assets would therefore assist the capital allocation decisions of corporate executives and financiers.

€# *The Commission should consider how to define, measure and support all types of innovative processes.*

€# *The Commission and Member States should consider ways to measure the value of intangible assets, particularly in the service sector, as a means of leveraging investment in innovation.*

**Spreading innovation.** Another important challenge is the quick absorption of the new technologies by companies. This issue deserves strong support in terms of technological diagnosis, consultancy and training.

€# *The Commission and Member States should encourage the spreading of innovation, in particular in SMEs, even if they operate in non-innovative sectors. Best practices should be disseminated.*

**Regional innovation policy.** Companies, especially SMEs, benefit from proximity to researchers and businesses with similar or related expertise, as illustrated by the development of successful research-intensive business clusters. This suggests that regional / local authorities will have an increasingly important role to play in stimulating innovation, for example in promoting networking, collaboration and knowledge transfer, in supporting incubators or in directing funds to build upon local strengths and to promote the creation of poles of excellency.

€# *The Commission and Member States must recognise the value that regional / local bodies can add in stimulating regional innovation, for example high-tech start-ups and regional innovation clusters. In addition, the value of international collaboration between regions must be recognised, as well as the development of “excellence areas” across Europe, gathering universities, high-tech industries, and research centres, in order to reinforce the attractiveness of Europe.*

**Procurement.** By developing a more proactive approach to public purchasing, it is possible to use procurement as a catalyst for innovation, for example, through using ‘outcome-based’ specifications. There is also clear potential for stimulating innovation through the approach to commissioning public research, in particular by increasing the demand for R&D from smaller firms.

€# *The Commission and Member States should examine the potential impact of their public procurement systems and take appropriate action to enable these systems to stimulate innovation, giving particular consideration to SMEs, while continuing to protect open and fair competition within the internal market. A working group of the Council should study this issue and report by the end of 2004.*

€# *The Commission and Member States should take steps to improve the innovation impact of public research spending, particularly through the engagement of innovative SMEs in the R&D process.*

The items of the innovation action plan should be subject to a common work of the Ecofin and Competitiveness Councils.

### European Initiative for Growth

**Key technologies.** The Initiative for Growth has been launched with the aim of strengthening the long-term growth potential of an enlarged European economy and will make substantial resources available to this end. It is therefore important to take full advantage of these resources to promote R&D and innovation, and to direct them effectively towards areas that will have long-term impacts.

€# *The Commission, Council and EIB should give priority to industrial R&D projects within the European Initiative for Growth, especially in key cross-sectoral technology areas with the potential to have pervasive, long-term impacts, such as biotechnology, micro- and nano-technologies, and telecommunications.*

### Research Framework Programme

**Research programmes.** Research outputs underpin the innovation process. More efforts are necessary to underpin the common objective of Member States and the Community to increase spending for research and development towards 3% of EU GDP. The sustainability of competitiveness needs to have research outputs in the long term. This could be supported by EC Budget spending where there is clear EU value added, although it is important to ensure that EU policies are financed within a sound budget discipline framework and do not exceed the agreed Financial Perspective ceilings, including ceilings for the next Financial Perspective no higher than 1% of EU GDP. The European Research Framework Programme (FP) will make a substantial contribution to raising levels of R&D. It is therefore important to ensure that the FP promotes both fundamental research and technological development in order to reinforce innovation and industry involvement in an optimum and sustainable way.

- ⌘ *The Commission should consider how the Programme's design and the administrative structures could better meet the needs of businesses and research institutes by simplifying the administrative proceedings and increasing the success rates. FP (from 2007) should reinforce links between business and enterprises. Decisions should be justified by evaluation evidence and, where possible, pilot projects.*
- ⌘ *The Commission should consider the long-term competitiveness of our industrial base and the need to provide effective and balanced support for both applied and fundamental research in order to guarantee this goal.*
- ⌘ *The Commission should consider the scope for using FP to build on existing business-led networks and projects for developing R&D collaboration between Member States, particularly EUREKA, which has a high level of industry engagement; this could involve, for example, a range of pilot projects to show how businesses can be engaged more actively in pan-European science, technology and innovation.*
- ⌘ *The Commission should improve the impact of FP on researcher mobility and business-university collaboration. In addition, the benefits of private-sector intercompany mobility should be examined in the light of the lack of mobility opportunities of employees in SMEs.*
- ⌘ *FP7 should have a clear long-term strategy for strengthening industry's capacity for technological innovation. The Commission should examine whether spending for basic research could have more impact if decisions were clearly based on excellence criteria in a competitive way.*

## **Conclusion**

It is vital that Europe takes action to remove barriers that currently impede innovation. Framework conditions and workforce skills must be improved, and Government interventions must be targeted more effectively at identified market failures. Only by increasing its competitiveness will Europe deliver greater prosperity for its citizens, and innovation is key to this goal.

## **ANNEX: The French, UK and German experiences**

In many of the areas discussed above, there are substantial policy differences amongst Member States. As the R&D Action Plan recognised, raising performance across the EU in such circumstances will therefore require a different mix of policies in each Member State, tailored to domestic circumstances. In this context it becomes especially important that any action at Community level allows sufficient flexibility for different policy approaches.

However, there is a significant role for Community bodies to play in helping Member States to share best practice. This Annex seeks to contribute to this process by outlining recent French and UK approaches to innovation policy.

### The French experience

The French authorities believe that R&D projects that lay the technological ground-work for the development of future innovations, products and jobs are of strategic importance and must be encouraged by the public authorities as part of an overall strategy of encouraging industry as a whole to innovate and develop its technical capabilities.

French innovation aid can be classified in four major categories: aid for strategic investment in R&D projects, tax incentives, specific aid for SMEs spending on innovation, and the improvement of the innovation environment.

In order to reinforce and to better focus public support for innovation, a new **innovation plan** was announced in March 2003, and will be implemented in 2004. The action plan addresses four specific issues: business angels, support to innovative start-ups, a new R&D tax credit, strengthening the partnership between the public research and the industrial research community.

#### **1/ Aid for strategic R&D projects**

State aid will be focused on medium-term industrial R&D projects in a few priority areas. The major projects are to be supported within the framework of Eureka clusters or through the national research and technological innovation networks. Some of the main areas to be covered are: water and the environment, European food reference, human and plant genomics, materials and processes, earth and space, micro and nano technology, telecommunications, fuel cells and terrestrial transport).

## **2/ Tax incentives**

€# For businesses : The R&D tax credit is designed to support corporate R&D investments. From 2004, the new tax credit will consist of an income tax rebate corresponding to 45% of R&D spending incurred during the year less average R&D spending for the previous two years, plus 5% of research expenses incurred during the year. All firms can benefit. The eligible expenses are mainly those associated with the human and technical resources allocated to research and subcontracting. The R&D tax credit is capped at € 8m per business.

€# For investors : mutual funds for innovation were created in 1997, in order to boost innovation funding in SMEs. Large tax rebates and exemption from capital gain taxes are attached to this funds.

## **3/ Specific aid for SME projects**

SMEs represent less than 20 per cent of private R&D spending. However they are a major source of innovation.

€# A specific agency is in charge of supporting their projects, in every sector and in every project development phase, from feasibility studies to preparation of industrial launches. The aid provided can cover up to 50% of project costs but is to be refunded in case of success. The agency also provides assistance with recruitment, technology transfer, etc...

- In the new action plan, a specific measure is designed to support the R&D projects of innovative start-ups (*Jeune Entreprise Innovative*). The aim is to help SMEs created on the back of a R&D project to rise above breakeven, through significant long term exemption from social security charges and from taxes (local taxes and capital gain tax). To be eligible firms must have been in existence for less than 8 years and spend at last 15% of total charges on R&D. The exemption from social charges and tax depends on the existence of an identified R&D project. The subsidy cannot be more than €100 000 over three years (de minimis threshold).

## **4/ Improving the innovation environment**

€# Seed-capital-funds. Start-ups require capital investments from inception. The government encourages the development of seed-capital by assisting funds or companies which invest in businesses involved in public research. The action plan has also designed a new measure in order to encourage the

creation of “venture capital companies with a sole owner “ (business angels), by creating an attractive legal and fiscal status for investors.

#### €# Human capital and technology transfer

- incentives are introduced to encourage SMEs recruit junior engineers for a one –year technological development project with the assistance of a centre of expertise.
- specific agreements provide an annual subsidy to businesses which recruit young graduates who decide to prepare their doctoral thesis in a business. They will receive wages, guidance, and oversight by a research laboratory. According to the innovation action plan the number of these agreements will be progressively increased, and doubled by 2010. In 2004, 2500 doctoral students will benefit of this support.
- The creation of innovative firms from a university research background is encouraged through the network of public incubators and through specific incentives to researchers.

€# Regional support. As part of the ongoing decentralisation strategy, local authorities will play an increasingly large role in the years ahead (business premises, technological resource centres, etc).

#### The UK experience

The UK has an excellent science base in the volume, quality and influence of the research publications it produces. However, UK business R&D lags behind our major competitors, as does our overall innovation performance as measured by output indicators such as turnover due to new products or quantity of patents. The challenges for the UK are therefore not only to stimulate business R&D, but more generally to facilitate better the translation of research outputs into successful business innovation, which is what ultimately delivers higher productivity growth. The UK is tackling these challenges with a mix of policy instruments that reflect the wide influence government can have over innovation performance, and has just completed a major review of innovation policy (the Innovation Report) that will steer future thinking.

Firstly, there is an emphasis on shaping the overall environment in which innovation occurs, including:

€# policies to create the right business environment for innovation to flourish, combining macroeconomic stability, a strong competition regime, and sensitively-designed regulation, with a sympathetic business tax system that includes specific measures to promote innovation, such as allowing tax deductions for the cost of acquiring intellectual property; and,

€# policies to ensure an adequate supply of quality research and skills, such as increases in funding for science research and infrastructure, increases in PhD stipends and postdoctoral salaries, and the recruitment of more science teachers in schools.

Beyond this, however, the UK is pursuing specific measures to promote knowledge transfer from research institutions to businesses, as well as a range of interventions to target market failures in the innovation process, such as R&D tax credits, measures to ensure adequate access to finance for innovative firms, and programmes to support business innovation.

## **1/ Promoting knowledge transfer**

€# The UK Government has just published an independent review of business-university collaboration, which aims to help businesses better exploit the technologies and skills in the university sector. Key recommendations include a new funding stream for business-relevant research, increased and improved funding for knowledge transfer and a greater role for the Regional Development Agencies in facilitating this, the development of model contracts and a protocol for intellectual property to speed-up IP negotiations, and the establishment of a business-led R&D employers' forum.

€# The UK also has a variety of schemes to promote knowledge transfer from research institutions to business, such as the Higher Education Innovation Fund, which enables universities to translate research into the commercial field, for example through licensing or spin-outs, and to promote entrepreneurship. There is a parallel knowledge-transfer fund for Public Sector Research Establishments, and programmes that support collaborative research between firms and universities.

## **2/ R&D tax credits**

€# The UK operates a volume-based tax credit to promote commercial research and development, which increases the value of the tax deduction for current expenditure on R&D from the usual 100 per cent to 125 per cent for large companies and 150 per cent for small and medium sized enterprises,. Loss-making SMEs can also claim repayment of the credit at 24 %.

Since the inception of the SME credit, there have been more than 8,000 claims, giving around £500 million of support to innovative businesses, and take-up continues to increase. The Government is also consulting further with business on how to improve the range and operation of the credit.

### **3/ Access to finance**

- €# The Government has increased access to risk capital through a number of funds directed towards SMEs, including funds with a specifically high-tech focus such as the £100 million UK High Technology Fund launched in 2000, with Government, EIB and private pension funds co-investing in technology venture capital funds.
- €# Tax incentives have also played a role in increasing the supply of risk capital in the UK in recent years, for example via Venture Capital Trusts, where the incentives encourage investment by individuals in just the type of smaller, higher-risk companies that play an important role in the innovation process. More generally, radical reductions in capital gains tax have also improved the risk/reward balance for business angels investing in technology start-ups.

### **4/ Programmes to support business innovation**

- €# The UK has recently increased its budget for schemes to support business innovation, such as grants for SME R&D in technologically innovative products. We run programmes that enable young graduates to work on projects in firms that will transfer ideas from the research base to boost the firms' competitiveness and productivity. We are also keen to ensure that British firms are aware of leading edge technologies in other countries and offer a range of assistance to help firms establish partnering links in many countries. Following the recent Innovation Report, the UK's range of business R&D support schemes will be focussed even more on key high-tech and innovative areas.
- €# An increasingly important element of the UK Government's activities has been investing in the diffusion and development of new or emerging technologies with the potential to have pervasive impacts and to disrupt traditional businesses and markets. Examples to date are biotechnology, genomics, micro- and nano-technologies and e-science. As an outcome of the Innovation Report, the UK is developing a Technology Strategy, with a medium to long-term perspective to guide future support for science and innovation. The Technology Strategy will aim to pull together research funded in the universities with industrial interests and will build on existing mechanisms such as the EU Framework Programme and EUREKA.
- €# We are anxious that the regional authorities in the UK should play a leading role in promoting business innovation alongside central Government. This

already happens in the Devolved Administrations, but the English Regional Development Agencies are now being allocated substantial funds to use according to the priorities they have established in their economic strategies.

## **The German experience**

The German innovation policy aims to stimulate innovation activities in business, research, government and society. Priority is given to framework conditions that are favourable for innovation. In case of market failure, additional targeted support programmes are offered. The range of support comprises the whole life cycle of enterprises (start-up, growth, subsequent ownership). In the field of innovation financing, the role of equity financing, such as venture capital, has become more important. The main objective is to facilitate the transfer of know-how to small and medium-sized enterprises. Due to Germany's federal system, both the national level and the state level offer support programmes for various purposes. The programmes are well coordinated between the different government levels.

### **1. Improvement of framework conditions**

- €# Further opening the energy, telecommunications and postal markets.
- €# Improving education and life-long learning.
- €# Reforming the social security system and the tax system to give business more financial scope for financing innovation.
- €# Developing the information society (E-government, E-business).
- €# Reducing bureaucracy in order to foster innovation and investment.
- €# Making more efficient use of research findings (more competition between research institutions, improvement of the patent system).

### **2. Financial aid**

- €# Facilitating access to venture capital to stimulate high-tech start-ups and young high-tech companies.
- €# Supporting national and international cooperation between business and research institutions/universities.
- €# Supporting regional innovation networks, in particular in the eastern federal states.
- €# Promoting technologies with good market perspectives such as energy-saving technologies, ICTs, biotechnology, nanotechnology and optic technologies.
- €# Supporting basic research and research infrastructure.

Innovation has a high priority in the present German policy. Therefore several additional activities have been approved or will be approved in the near future.

The German government has approved the **master plan: „Information Society Germany 2006“**. The master plan will support the different activities in business, research, government and society to further improve ICT penetration and use in the coming years.

The main objectives are to:

- €# further develop the number of broadband Internet lines;
- €# further develop digital broadcasting;
- €# adapt the current legal basis (Telecommunications Act, copyright law, EU directive on the patentability of computer-implemented inventions);
- €# continue the funding of IT research projects;
- €# promote Internet use by all groups of society;
- €# further develop E-government (Internet-based public procurement, electronic tax regulations, electronic local services, electronic job cards);
- €# further develop E-health (E-health card), and
- €# improve IT security measures.

The German government also has approved a **high-tech master plan for start-ups and SMEs**. The master plan introduces new measures to support high-tech start-ups and improves existing measures to facilitate cooperation between innovative SMEs and research institutions.

The main activities are:

- €# introduction of a new fund-in-fund to co-finance private venture capital funds, investing in high-tech sectors. The new fund is co-financed by the European Investment Fund;
- €# clarification of tax conditions favourable for venture capital;
- €# improvement of the support programmes for cooperation and networks between SMEs and research institutions.

Moreover, the German government will develop a **new, comprehensive „innovation strategy“** to push innovation in all areas of business, research, government and society. This new strategy will be published by mid-2004.