

Brussels, 15 Nov 2009

## **ERRIN response to the European Commission's consultation on European Innovation Policy**

### **ERRIN key messages**

**1) Regional dimension of research and innovation.** ERRIN, the European Regions Research and Innovation Network<sup>1</sup>, considers that regular collaboration and interaction between regional triple-helix actors is key to both technological and non-technological innovation. Regional and local public authorities and innovation intermediaries (clusters, RTD networks, etc) play a crucial role in enabling and facilitating such cooperation. The EU innovation policy should help improve regional research and innovation-friendly ecologies and the functioning of regional innovation systems by providing tools and support (including financial) to help regions facilitate these interactions. It should also support networking and interaction among triple helix actors across Europe.

**2) Intra- and interregional cluster networks.** As **clusters** are one of the main tools for catalysing and managing triple-helix interactions and for supporting more effective innovation by helping create trust relationships between regional innovation players and embed knowledge within the region, the EU should continue to support networks of clusters. The European Cluster Alliance (ECA) is the right approach, however, there is the impression that it is not connected to the cluster actors on the ground in the regions. The ECA is currently targeted at policy makers. This will need to be reviewed alongside the second phase of the European Cluster Observatory, which includes the objective of linking cluster initiatives more effectively.

**3) Access to finance.** Access to finance is crucial to enable businesses to implement innovative ideas. However, financial markets today do not meet the needs of European SMEs. A European market for risk capital is urgently needed. European Innovation Policy should, thus, work towards creating a European-wide venture capital fund and adapting the EIB risk-sharing facility to the post-crisis landscape.

**4) Simplification of instruments.** The EU needs to simplify its offer of instruments supporting innovation so as to increase visibility of EU programmes and their understanding by the innovation community. Rationalising the instruments and improving synergies between the various EU programmes (in terms of objectives, administrative procedures, etc) in favour of innovation should be a central issue of the Innovation Action plan currently being prepared by the European Commission.

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<sup>1</sup> [www.errin.eu](http://www.errin.eu)

**5) SME involvement and benefit.** In future the EC should make sure that it designs instruments that produce a better impact on innovation within SMEs as well as an increased direct participation of SMEs in supported projects. EC Instruments should therefore encourage the participation of groups of SMEs who are co-located, probably via cluster development initiatives. This will encourage the participation of smaller SMEs which have limited resources.

**6) Non-technological innovation.** ERRIN considers that the future EU Innovation Action plan should aim at helping the EU face major societal challenges. To this end, any innovation strategy should be designed with the aim of finding an appropriate balance between support to technological innovation and non-technological innovation, in particular social innovation.

**7) Open innovation.** Effective governance and business models for open innovation are key to reducing transaction costs and capitalising on spill-over effects in the knowledge economy. Existing instruments to support innovation should be adapted to support Open Innovation initiatives (e.g. Living Labs) and mechanisms and build European-wide networks and OI marketplaces. Open Innovation results from relative proximity, the ability of people to connect, meet face to face and build relationships based on trust. The geographic factor is, therefore, an important element in the concept of open innovation. The EU action should then contribute to stimulate and support the establishment of such common places for innovation.

**8) Eco-Innovation.** The future EU Innovation Action plan should provide support for businesses to reduce the environmental impact of their manufactured products by working on design, raw materials, production, use, reuse application and ultimate disposal. This will help the EC to achieve ambitious low carbon targets.

## ERRIN responses to the Commission's questionnaire

**(1) Do you agree with the Commission's assessment of the main achievements and shortcomings of Community policies in support of innovation?**

ERRIN welcomes the Commission's Communication of 2<sup>nd</sup> September 2009, which gives a broad overview of the innovation policy implemented in recent years and the achievements in terms of reinforcing the budget of existing instruments (FP7 budget, Structural funds earmarking) and launching new instruments (the EIT, JTIs and other PPPs) in favour of innovation.

We encourage the EC to undertake and publish a thorough **analysis of the impact of the various EC measures on regions and their innovation systems** (see question 12) and their added value to national and regional actions.

ERRIN shares the European Commission's views on the current shortcomings and especially agrees with the statement that better coordination between regional, national and EU policies is needed if we want to increase the efficiency of public funding for innovation. Other issues are those of the **disparity and fragmentation of EU instruments** and the lack of coordination between actions and policies by different relevant DGs, resulting in a lack of clarity and visibility of EU policy and schemes for innovation players.

Better governance at the EU level would improve efficiency and the leverage effect of EU actions by avoiding a situation where programmes have different funding criteria, budgetary levels of intervention and procedures. **Better governance** through the integration of regional strategies would also limit programme overlaps and generate a more optimal policy mix.

**(2) Should EU innovation policies have a stronger orientation towards addressing major societal challenges? If so, which ones should be prioritised?**

Societal challenges are currently at the heart of local, regional, national and European political agenda's across the European Union. There is a general consensus that **public policies must put individuals/society at the centre** and contribute to addressing major societal challenges such as environment/climate change, health, poverty, ageing, energy-related issues, wellbeing, economic growth and jobs creation, etc.

ERRIN regions are convinced that **research and innovation policies significantly contribute to address these challenges** and agree that future EU policies, including EU innovation policy, should address them in an appropriate manner, most notably by introducing them in an integrated and balanced way into the future Growth & Jobs strategy.

These challenges could be considered as the pillars of a new innovation policy aimed at exploring new innovation models (open innovation, innovation by the users...) allowing contributions from the innovation community and other stakeholders such as civil society, public authorities, etc.

European innovation policies should be connected to major societal challenges in order to insure that markets and targeted technological sectors contribute to citizens' wellbeing. The Communication of the European Commission on the Lead Market Initiative in Europe shows how markets linked to societal challenges have a strong added value (recycling, building, renewable energies, improvement of patients' care quality, etc.)

**(3) *Should innovation policy have any specific sector approach? If so, which sectors should be supported and which specific policy measures should be developed?***

Innovation is a very broad concept and it often results from interactions between people and organisations with very different backgrounds and specialisations. In other words, **technological innovation often comes from interdisciplinary research embedded in regional eco-systems**. ERRIN would advise against ignoring this reality and focusing only on sectoral approaches.

It is, therefore, very important that the future European Innovation Policy includes a **strong territorial dimension** so that stakeholders on the ground, in particular SMEs, can actually benefit from these policies. Experience shows that the way recent major initiatives such as the Technology Platforms and Joint Technology Initiatives have been set and implemented makes it rather difficult for SMEs to get involved. One good example of combining a sector-specific with a territorially based cluster approach is the DG TREN smart cities initiative.

Since **cluster development is key for regions to strengthen competitiveness and to support more effective innovation**, the EU should continue to support networks of clusters. The European Cluster Alliance (ECA) is the right approach, however, there is the impression that it is not connected to the cluster actors on the ground in the regions. The ECA is currently targeted at policy makers. This will need to be reviewed alongside the second phase of the European Cluster Observatory, which includes the objective of linking cluster initiatives more effectively.

It is also important that **transversal technologies and know-how, such as ICT, nanotechnologies and design**, that have a genuine transversality as well as a considerable leverage effect on innovation performances in many different sectors **should receive specific attention and support**. Also, **eco-innovation** should be used to enable businesses to reduce the environmental impact of their manufactured products by working on design, raw materials, manufacture, use, reuse application and ultimate disposal. This will help the EC to achieve challenging low carbon targets.

More globally, ERRIN believes it is important that decision-makers in the EU look carefully at the parameters and conditions that must be met to allow innovation to happen and **support building the right regional eco-systems** for innovation, i.e. parameters such as the quality of the business environment, the kind of support and funding needed by the innovation community, the facilitation of triple-helix type of interactions delivered by innovation intermediaries (such as clusters, regional networks and innovation agencies), cluster management and knowledge transfer issues, and find out how the EU level can add value to what MS and regions already implement in the field.

**(4) Do existing instruments to support innovation need to be adjusted to reflect the changing nature of innovation and integrate new innovation patterns (services innovation, open innovation, user-driven innovation etc...)?**

Demand and user-driven innovation activities are emerging as powerful instruments to complement more traditional supply based (eg. technology based) development work. It is important that innovation and development environments exist for innovation activities based on the users' needs in which novel or existing services and products can be developed and tested.

**Open innovation** has the potential to become one of the key drivers for the transformation of how we do business, how we interact with our government and actively participate in our democracies, how we care for our well-being in terms of health and ageing, how we organise our life in terms of transport and living, how we protect our environment and how we best use our scarce energy resources. User-driven open innovation methodologies or eco-systems, such as living labs, have enormous potential in bridging the innovation gap between technology development and the rapid deployment of new services.

Existing instruments to support innovation should then support these new mechanisms to stimulate innovation. Just to give one example, the integration of a stronger user-perspective, for instance through living labs, and an Open Innovation approach, could be integrated into the EU Lead Market Initiatives.

Furthermore, there is a trend towards common open platforms, where cities have gained an important role. Many cities in Europe and across the world significantly invest in common platforms for internet-based services cutting across domains to become "smart" cities. A transnational network of "smart cities" should support the sharing of experiences and best practices in the implementation of open platforms for new Internet-based services in a set of key areas for public authorities.

Finally, if we take the specific case of the main DG Enterprise & Industry programme in favour of innovation, the Competitiveness and Innovation Programme (CIP), it seems to us that it somewhat misses to address the needs of and to involve what should be its main targets, i.e. European **SMEs**. If the CIP is to be continued after 2013, its strategic objectives should be more clearly defined, its budget reinforced and its impact on SMEs increased.

The CIP should encourage the participation of groups of SMEs who are co-located, probably via cluster development initiatives. This will encourage the participation of smaller SMEs with limited resources.

**(5) What are the most important remaining obstacles for the EU to unleash its full creative and innovative potential, in particular through innovative SMEs?**

Some of the most important obstacles are:

- the lack of finance and of an EU-wide risk capital market;
- the lack of an entrepreneurship culture;
- the lack of an innovation-friendly business environment;
- the lack of policy coordination;
- the absence of community patent and litigation system plus other IPR protection (trade marks, copyright, etc.);
- the lack of life-long learning opportunities;
- the lack of cooperation between triple helix actors;
- the lack of public sector innovation (e.g. public procurement).

**(6) What are the implications for research policy of the changes needed to policies in support of innovation (e.g. the goal of addressing major societal changes, etc ...)?**

ERRIN believes that schools and universities should not only address current societal needs but equally equip students with the mental and conceptual skills and attitudes that equip them with an ability to embrace and adapt to change and shape their future environment. This is particularly relevant for the low carbon society of the future where new skills and behaviours across society will be needed by all.

Basic research that compresses and generalises understanding in this way, invigorates teaching that probes the limits of understanding. Together, they are the fuel for the university engine. Such generic understanding also represents a fundamental “transferable skill” which can be applied to a much wider range of circumstances and phenomena than any catalogue of specific knowledge. It is a vital investment in the future<sup>2</sup>.

ERRIN, therefore, argues that **research policy should continue to be balanced between funding for basic research and funding to applied research** so that the EU is able to face both short and long-term societal challenges.

ERRIN agrees with the Lund Declaration (July 2009) which states that meeting the grand challenges facing Europe will require strengthening frontier research, taking a global lead in the development of enabling technologies, developing excellent and well-networked knowledge institutions alongside world class research infrastructure coupled to a risk-tolerant and trust-based approach in research funding.

<sup>2</sup> “What are universities for?” League of European Research Universities, 2008.

As a consequence, ERRIN would like to stress its support to the European Research Council (ERC). **ERC grants represent a real added value** in terms of funding investigator-driven frontier-research activities contributing to finding solutions to the challenges faced by our societies, opening new opportunities for scientific and technological advance and **producing new knowledge with potential for innovation leading to future applications and markets.**

Most new ideas are not the result of a flash of inspiration to a lone genius inventor; they come from how people create, combine and share their ideas. It is Europe's capacity to unlock and harness the talent, energy and imagination of all individuals across Europe is crucial to making innovation stronger and more sustainable. It is here that Europe's regions and universities can make a difference by encouraging mobility and transnational cooperation.

ERRIN considers that all regions, even those without established scientific excellence should be encouraged and supported to develop the capacities and human capital to be able to contribute to a truly innovative Europe.

**(7) Which scope exists to better facilitate the consolidation of world-class innovation "eco-systems" or clusters in the EU at regional level, taking into account emerging industries?**

The **enabling environments for research and innovation friendly ecologies in the regions** should become the organising principle of the European Research Area fostering the cooperation in the knowledge triangle and lowering transaction costs for open innovation.

Supporting initiatives for global excellence should remain the most important criterion for European support but the EU should also do more to build capacity for research and innovation in regions that cannot access excellence programmes such as the Research Framework Programme or EIT calls for KICs.

The EU should seek to improve strategic agility to respond to needs for change. It should be possible for the EU to launch new programmes and redirect existing ones quicker in an end-user, need-driven manner.

Emerging industries will tend to come from the overlaps between existing industries and transversal sectors, as well as from within some declining sectors. Initiatives need to encourage these overlaps and to critically examine growth opportunities from within declining sectors.

**World-class innovation clusters** will emerge thanks to a more effective linking of innovation centres in different regions across Europe. Initiatives need to encourage these linkages and improve access to know-how about knowledge, technology transfer and innovation capacity in different regions.

World-class innovation clusters will be driven by new market opportunities for innovative products and services. There is a clear link to the Lead Markets Initiative and to the emergence of other global growth markets. Some of these growth markets will be to address global societal challenges.

**Eco-innovation** is necessary to ensure that sustainable products and services produced by sustainable processes can be developed to address these growth markets.

Global value networks have an increasing importance as an approach. In the global value networks model, operating areas are naturally extended beyond geographical and cultural borders. Enterprises should be expected to create global value networks and find competitive advantage in them. This calls for continuous foresight and analysis of insight as well as strategic agility in response to changes.

**(8) *How could the cooperation between regional, national and European innovation support programmes be reinforced to address the new challenges faster and more efficiently?***

This cooperation is linked to the question of indicators and of finding a powerful and transparent system of monitoring the implementation of European innovation policy.

For better policy coordination among the different levels of government **the Open Method of Coordination could be extended to include a proper regional dimension**. Macro-regional strategies such as the EU Strategy for the Baltic Sea Region, represent an exciting new approach that should be further developed to advance innovation policy coordination in Europe.

Also a more long-term and systematic monitoring and sharing of best practices between regions in Europe on how they implement the Lisbon Strategy is needed.

Article 169 initiatives such as BONUS and AAL have proven to be vastly popular among practitioners, and ERRIN welcomes further joint initiatives of this type with more support and openness to participants from Member States.

This task should be supported either by an Innovation DG in the European Commission and/or a European Observatory type of initiative and should be advised and supported by established stakeholders (CoR, European regional networks, etc.).

Innovation, as a cross-cutting issue, and European Innovation Policy also requires oversight from a European Parliament committee with a cross-cutting outlook and mandate.

**(9) *What could the EU do to provide adequate access to finance to SMEs and entrepreneurs?***

The EU should increase the visibility of existing programmes and instruments and work towards **simplification** and cutting of 'red tape' to **facilitate SME access**, by cooperating closely with financial institutions and intermediaries.

Existing aid is too much oriented towards high-tech companies. There needs to be more of a balance to also assist low- and medium tech companies that have a capacity to grow to become more innovative. Funding instruments should also be broadened to solve problems caused by credit squeeze and expanded to include start-ups.

A European market for **risk capital** is needed. The EU should create a European-wide venture capital fund.

Since, the most important source for innovation funding are commercial banks, which are mostly risk-averse, the EU should adapt the scope of the EIB risk-sharing facility to the post-crisis landscape and provide guarantees, loans and other debt financing for research and innovation to SMES, helping to leverage regional innovation initiatives.

The market failure for SMEs in sourcing funding is mainly around innovation, which is technically complex, involves disruptive technologies, has medium/long term potential and is high risk. A significant proportion of EU risk capital should be provided for exploiting this type of innovation as otherwise opportunities for producing a step-change will be lost.

***(10) Could the EU contribute to exploit the innovation potential in public services?***

Mainstreaming of innovative activity in all public sectors represents a major challenge for policy making and resource allocation. This policy making will require interdisciplinary flexibility and the capacity to take risks. Sustained and adequate support for innovation projects in turn requires financial and human investment by public authorities. The necessary funding and operating will – with the support of the European Union - have to be independent of the output of basic welfare services.

In developing services and launching new services, public authorities have a strong instrument: **public procurement**. Public authorities can open public service markets and allocate their procurements so as to systematically support the development and take-up of innovations.

As in the U.S., EU governments should make more use of funding technology development through public procurement. The EU should establish an EU Framework programme to cornerstone “Government Innovation Contracts” competitions in individual member states and introduce US style SBIR programmes in the EU in cooperation with national and regional government.

The European Commission should also help develop a permanent and wide-reaching membership-based transnational network of public authorities and all other relevant stakeholders to foster practical cooperation and dialogue between public authorities, companies providing services to the public sector and the representatives of the end-users; to exchange information and knowledge on innovation in the field of pre commercial public procurement and creating tools and mechanisms to make knowledge work in practice.

***(11) How could the Community funding programmes for innovation, including FP7, CIP and Structural Funds, be simplified and streamlined?***

ERRIN agrees that there is scope for rationalisation and simplification of EU instruments supporting innovation in order to increase visibility, understanding and impact of EU programmes. A first step should be to reduce the number of mechanisms and to design more similar procedures for the implementation of the different tools in order not to discourage potential participants and leave the field for the big players only.

Concerning the objectives of the instruments, there should be a clear recognition that the EU needs to fund cooperation between RTD actors in Europe based on excellence, as well as fund RTD capacity building for all regions in Europe. The capacity building must be different for regions in different stages of RTD capacity in Europe.

However, it is important to note that regions that represent the most successful ones in Europe are of utmost important also for capacity building. If Europe is to compete with the top innovators in the world, the capacity, i.e. the innovation environments, of Europe's top regions must be developed to the cutting edge, and the EU clearly has a role to play in helping this to happen.

***(12) What could be realistic and meaningful quantitative and qualitative targets for future European innovation policy?***

A powerful monitoring system with a meaningful set of indicators and targets for EU, national and regional levels is certainly a sine qua non for a European Innovation Plan that aims at real impact on the ground. Such a system needs to rest on a balanced set of broad innovation indicators, including, for instance, also the education system. Measuring regional-level impact is of particular importance. Naturally, these indicators should be linked to the objectives of the post-2010 Lisbon Strategy.

Indicators should not just be input oriented, as the Barcelona target, and output-oriented but also include a broad range of process indicators. The indicators developed in the European Innovation Scoreboard would make a good starting point for developing such a system with the involvement of relevant stakeholders at the different government levels. Monitoring results should be made public and good progress highlighted at European level.