Green Paper: From challenges to opportunities: towards a common strategic framework for EU research and innovation funding

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PURPOSE: to launch a public debate on the key issues to be taken into account for future EU research and innovation funding programmes. (Commission Green Paper)

BACKGROUND: the budget review has proposed that the full range of EU instruments for research and innovation work together in a Common Strategic Framework. At its meeting on 4 February 2011, the European Council discussed innovation and supported the concept of the Common Strategic Framework to improve the efficiency of research and innovation funding at national and EU levels.

The Innovation Union flagship initiative advocates a strategic and integrated approach to research and innovation. Currently EU research and innovation funding and initiatives in the current programming period (2007-2013) are as follows:

- the Seventh Framework Programme (FP7) with its budget of EUR 53.3 billion supports research, technological development and demonstration activities across the EU ;
- the Competitiveness and Innovation Framework Programme (CIP) has a budget of EUR 3.6 billion and aims to encourage the competitiveness of European industry, with SMEs as its main target;
- the European Institute of Innovation and Technology (EIT) is an autonomous EU body bringing together the higher education, research and business sectors to stimulate innovation. A contribution of EUR 309 million was provided to the EIT from the EU budget;
- through the Cohesion policy, about EUR 86 billion (almost 25% of the total Structural Funds budget) is allocated to enhancing the capacity of regional economies.

The landscape of EU research and innovation programmes has developed over recent decades and now constitutes a significant share of the EU budget. However, various evaluations have also identified a number of shortcomings and deficiencies, in particular the lack of a whole chain approach to research and innovation, the complexity of instruments, over-bureaucratic rules and procedures and a lack of transparency. Improvements for future programmes should focus on:

- clarifying objectives and how they are translated into the supported activities, while maintaining flexibility to respond to emerging policy needs;
- reducing complexity: lack of coordination between EU and Member State funding adds to the complexity and leaves a potential for overlap and duplication, for instance as regards State Aid measures to support SMEs or to provide risk capital;
- increasing added value and leverage and avoiding duplication and fragmentation: EU research and innovation funding should provide more added value, increase its leverage effect on other public and private resources and be used more effectively to support the strategic alignment and pooling of national and regional funds to avoid duplication and achieve scope and critical mass;
- simplifying participation by lowering administrative burdens, reducing time to grant and time to payment and achieving a better balance between cost and trust based approaches;
- broadening participation in EU programmes : while there is s SME participation in the CIP, the FP7 interim evaluation highlighted the need to stimulate industry and SME involvement. It also pointed at the need to boost participation of female researchers and participants from newer Member States;
- increasing competitiveness and societal impact from EU support: this would require better uptake and use of results by companies, investors, public authorities, other researchers and policy makers. It also involves supporting broader innovations (including non-technological and social innovation) which are not the result of research activities. The ultimate users of innovations (be they citizens, businesses or the public sector) should be involved much earlier in our actions to accelerate and broaden the exploitation of results and to encourage greater public acceptance in sensitive fields such as security or nanotechnology.

CONTENT: this Green Paper launches a public debate on the key issues to be taken into account for future EU research and innovation funding programmes. In line with the priorities of the Europe 2020 strategy and, the Common Strategic Framework will focus on addressing societal challenges, encouraging the competitiveness of Europe's industries and the excellence of its scientific and technological base.

1) Working together to deliver on Europe 2020: the Common Strategic Framework will cover all relevant EU research and innovation funding currently provided through FP7 and CIP and EU innovation initiatives such as the EIT on the basis of coherent goals and shared strategic objectives. It offers great potential for making EU funding more attractive and easy to access for participants. It will also allow:

- the development of a single entry point with common IT tools or a one stop shop for providing advice and support to participants;
- the development of a simpler and more efficient structure and a streamlined set of funding instruments covering the full innovation chain in a seamless manner;
- clear possibilities for administrative simplification through the development of a more standardised set of rules covering all participants in EU research and innovation programmes. Allowing for flexibility will be necessary to cater for the diversity of funding needed to cover the full innovation cycle or for requirements linked to specific conditions.

2) Tackling societal challenges: the Innovation Union called for linking future EU funding programmes more closely to ambitious policy objectives in areas such as climate change, energy security, demographic ageing or resource efficiency by putting a stronger focus on tackling societal challenges. However, careful consideration is needed to identify those challenges where EU level interventions can truly make a difference, while avoiding overly prescriptive scientific and technological choices.

Current EU funding programmes have put considerable effort in tackling societal challenges, predominately through a thematic technology push. Bringing researchers from across Europe together in collaborative networks has been at the heart of this approach and will continue to be vital in sustaining a European research fabric. Experience has shown, however, the limitations of this approach in achieving the necessary flexibility, creativity and cross-disciplinary research needed. The Innovation Union introduced the concept of European Innovation Partnerships

to bring together supply and demand side measures in addressing societal challenges. They have an important role to play in coordinating efforts and focusing activities across the innovation cycle.

3) Strengthening competitiveness: obstacles remain in transferring research outcomes from the laboratory through to the development, commercialisation and application phases. To remove these obstacles involves broadening support across the full innovation cycle (including proof of concept, testing, piloting and demonstration), including covering issues such as post-project follow-up, pre-normative research for standard setting, support to patenting and to non-technological innovation.

Within the framework of its Strategic Innovation Agenda, the EIT will continue to strengthen its business-driven approach through a focus on generating results and impact but also on leveraging substantial funds from the private sector.

Open, light and fast implementation schemes would enable SMEs and other stakeholders from industry and academia to explore new ideas and opportunities as they emerge, in a flexible way, thereby opening new avenues for innovation.

Intellectual property rights governing EU research and innovation funding are decisive for efficient exploitation and technology transfer, while at the same time they need to ensure access to and rapid dissemination of scientific results. They are also of relevance for international cooperation in areas of strategic interest.

New approaches could also be considered, particularly those stimulating the demand side and aiming to involve public and private end users earlier and more closely in the innovation process. Inducement prizes incentivise researchers to achieve stretching targets through the prospect of obtaining a financial award.

4) Strengthening Europe's science base and the European Research Area: Europe's science base is among the most productive in the world, yet it does not contain sufficient pockets of world class excellence where ground-breaking research results are generated which are able to drive structural change.

The Green Paper asks certain questions, such as : (i) how should the role of the European Research Council be strengthened in

supporting world class excellence; (ii) how should EU support assist Member States in building up excellence; (iii) how should the role of Marie Curie Actions be strengthened in promoting researcher mobility and developing attractive careers; (iv) what actions should be taken at EU level to further strengthen the role of women in science and innovation; (v) how should international cooperation with non-EU countries be supported e.g. in terms of priority areas of strategic interest, instruments, reciprocity (including on IPR aspects) or cooperation with Member States.

The consultation will close on 20 May 2011. The broad debate on this Green Paper will be complemented by targeted consultations, such as on the ERA framework and the EIT's strategic innovation agenda. On 10 June 2011, an event will be organised to wrap up the public consultation and discuss the results with the stakeholder community.

The Commission plans to put forward its formal legislative proposals for a Common Strategic Framework for EU research and innovation funding by the end of 2011. These proposals will be accompanied by ex-ante impact assessments, providing the necessary evidence base for the proposed options.