

Euro-CASE Position Paper on the Common Strategic Framework for Research and Innovation

Preamble

Innovation is the key to growth, competitiveness and thus social well-being in the 21st century. The capacity of a society to innovate will be crucial in an ever more knowledge-intensive economy. Innovation is also necessary in order to find new and lasting solutions to major global challenges, such as energy, climate change, or the future of information and communication. An adequate understanding of innovation thus has to consider the technological as well as the social aspects of innovation processes. That is why also the social sciences and the humanities, for instance in relation to studies on societal implications, technology acceptance, and risk analysis, will play an important role in successfully implementing innovations.

It is thus an urgent necessity that Europe develops a strong focus on the interaction of research and innovation in order to strengthen its position in the ensuing global scientific and economic competition.

Therefore Euro-CASE considers the Research and Innovation Union as an excellent opportunity for safeguarding and augmenting Europe's competencies in science, research and industrial innovation. Euro-CASE supports the enhanced and improved coordination in the EU research and innovation system and the emergence of a strong European Research Area (ERA) through a common strategic framework.

In general, Euro-CASE strongly supports the application of the criterion of "excellence" in the allocation of research funding. This criterion needs to be applied consistently and in all funding decisions within the next Framework Program. In addition Euro-CASE recommends utilizing parts of the structural funds more strategically in order to establish research and innovation infrastructures in the new Member States that are the basis for future economic growth and societal well-being. As the umbrella group bringing together 22 national academies of engineering and technical sciences from the old and new Member states, Euro-CASE believes that it can offer the Commission assistance in identifying and developing engineering excellence in the EU12.

Euro-CASE will actively participate in the ongoing consultation process of the Common Strategic Framework for Research and Innovation and will contribute to defining its scope, structure and content. This position paper has been prepared by the Euro-CASE member academies and concentrates on four main strategic issues.

1. Simplification

The European system for supporting science, research and innovation needs to become more flexible and less bureaucratic.

The paper work necessary for participating in EU projects of any kind is a major obstacle and has become a barrier for academic groups as well as companies, in particular SMEs. The funding system must be governed by rules and procedures which are transparent, convincing, and realistic and, over time, stable and reliable, thereby providing legal certainty and the necessary incentives to attract the participation of the best contributors.

While it is understandable that the European Commission is concerned with the possibility of financial mistakes, administrative errors and even fraud, the measures taken and implemented across the board within the EU in order to minimize these risks have led to a control system of reporting of previously unprecedented scale. The system now defeats its very purpose and is perceived as a bureaucratic burden. While acknowledging the need for smart and effective controls, the funding system should be based on trust into science and industry, best effort evaluation, risk-tolerance and entrepreneurship. The European Commission's attitude urgently needs to move from "control" into "trust" – the Union has to shed its image of being bureaucratic and inflexible.

Measures to be taken:

- reduce complexity by limiting the number of instruments and funding mechanisms
- consistent interpretation and application of rules and procedures by all officers, DGs and auditors
- unification of rules managed by different Research Executive Agencies
- acceptance of participants' national accounting norms
- accelerated procedures from application to contract in 6 months
- transparency, stability and reliability, legal security
- funding decisions based on appropriate, target-oriented and transparent criteria

2. Human capacity building and intensified support of young scientists

The future success of a common strategic framework for EU research and innovation funding is highly dependent on a well-functioning educational system.

The challenges for Europe in this context are an overall decrease in study results among European students compared to students from other parts of the world and a decrease in interest for higher education in science and technology. Both problems were pointed out to the Commission by Euro-CASE in 2009 as results of an international conference on the topic.

Euro-CASE therefore places great emphasis on the development of the educational system in Europe. Educational and training aspects should be considered central to all initiatives when planning for a common strategic framework for EU research and innovation funding. It is of great importance that the Directorate-General for Education and Culture and the Directorate-General for

Research and Innovation cooperate closely. Euro-CASE recommends strengthening the support of human capacity building, especially the intensified support of pupils and students.

Measures to be taken:

- implementation of funding for pupils and students in order to mobilise their competences and curiosity for research and innovation
- improvement of funding for junior researchers
- development of research sabbatical programs for European scientists to improve mobility at all career stages
- improving the flexibility of exchange programmes between companies and public institutions to foster their interdependence

3. Innovation

The Green Book has adopted a largely academic perspective of the current system and fails to sufficiently recognize the industry and business perspective. The science and technology push for innovation must be complemented by an industry perspective for innovation and a market-demand led need. In particular the Commission must move from a narrow model of innovation which concentrates on commercialising academic discoveries ("from research to commercialisation") towards a more effective and inclusive innovation stimulation strategy addressing both academic research and research in commercial firms.

Although the Innovation Union is moving in the right direction, Euro-CASE recommends the development of a clarified plan for innovation on its own merits.

Measures to be taken:

- support for a trans-European incubator systems incubators have been successfully implemented in EU individual countries; Israel can be taken as a role model
- harmonization of the public procurement system and the general terms and conditions used in the member states
- innovation procurement to be linked into a common strategic framework for EU research and innovation funding
- implementation of a Small Business Innovation Research (SBIR) system
- further harmonization of business and legal frameworks in order to allow for economies of scale and profitable innovation
- improved access to early stage venture capital in Europe
- full implementation of the EU Patent
- development of at least one large scale research programme led by a European strategic need

4. Increased participation of industry

In order to strengthen the EU's innovation potential, to implement the Research and Innovation Union and to increase Europe's competitiveness, greater emphasis must be placed on the entire value chain from basic research to innovation, demonstration and market deployment stages.

The industry participation in the framework programs (FPs) keeps going down from FP4 with 39%, FP5 with 33%, FP6 with 31%, and finally FP7 with 25%.

Against this background the active participation of industry including SMEs is of high priority. In order to increase the participation of the industry significantly, its particular needs should be given more attention than before. It is a common and successful practice that SMEs are engaged in cooperation with larger companies. The latter should be motivated further to cooperate with SMEs and the former to participate in such joint endeavors.

Measures to be taken:

- setting goals for industry participation in FP programs (we propose to not lower than 40%), and establishing a strategy to reach that goal
- focusing on technological excellence, convincing market entry plans and the potential market impact in the selection of projects
- removal of constraints restricting the formation of consortia best suited to deliver results, e.g. third party participation in a flexible way; smaller project teams; funding of international cooperation
- inclusion of large-scale projects, as well as smaller consortia depending on the needs of participants
- allowing SMEs to be associated partners/subcontractors
- respect for industry-specific long-term objectives.

The European Council of Academies of Applied Sciences, Technologies and Engineering is an independent non-profit organisation of national academies of Engineering, Applied Sciences and Technology from 21 European countries.

Euro-CASE acts as a permanent forum for exchange and consultation between European Institutions, Industry and Research.

Through its Member academies, Euro-CASE has access to top expertise (around 6,000 experts) and provides impartial, independent and balanced advice on technological issues with a clear European dimension to European Institutions, national Governments, companies and organisations.

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