



Parlamentul României
Senat

Bucharest, 18 May, 2011

Courtesy translation

OPINION

of the ROMANIAN SENATE, on the

GREEN PAPER FROM THE COMMISSION

**From Challenges to Opportunities: Towards a Common Strategic Framework for
EU Research and Innovation funding**

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The Senate of Romania has analyzed which approach is the best for the Common Strategic Framework for EU research and innovation funding which could be applied and interpreted uniformly in all the Member States.

Taking into account the report of our permanent Committee for Education, Science, Young People and Sport and Committee on Economic, Industries and Services, **the Plenum of the Senate**, during its session of the 18 May 2011, decided:

I. At the subparagraph 4.1., entitled *Working together to deliver on Europe 2020*, the answers to the questions from 1 to 8 are:

1. How should the Common Strategic Framework make EU research and innovation funding more attractive and easy to access for participants? What is needed in addition to a single entry point with common IT tools, a one stop shop for support, a streamlined set of funding instruments covering the full innovation chain and further steps towards administrative simplification?

The Senate considers that:

a) to generate sustainable changes, the EU strategies must be clear, visible, accurate, not only to describe the objectives, desires, but to provide solutions and flexibility to achieve them;

b) the common strategic framework should bring together a comprehensive and coherent set of tools that should harmonize with the interest of the potential participants in European Union funding in research and innovation;

c) the common strategic framework should provide for the implementation of SME support instruments adopted and implemented at EU level, such as stimulating economic facilities, provision of loan guarantees, considering the risks following budget revisions, the application of financial incentives for outstanding achievements and to involve youth and others;

d) the common strategic framework should include a category of instruments due to bring compatibility and harmony between its operational instruments and the instruments and the legal framework specific to financing and innovating national research;

e) it is necessary to improve access to IT network for broad categories of potential users: the extension of the IT network in unconnected areas, public IT access points and PUBLIC technical assistance in applying for financing projects;

f) the system of allocation of funds must be simple and flexible, one solution being that of creating national centers / regional, which work independently and have relatively easy access to funds;

g) access should be placed both on the immediate application of research results, and the pre-competitive research, whose average time from idea to application, with the potential of operating on the market is approximately eight years and which generates new knowledge and without whom not innovation and application doesn't exist;

h) a network of consulting firms should be put into place, accepted by the EU, certified for consulting the design applications, which could be given also by those who have completed or who conduct successful projects;

i) it would be necessary the appearance of a program of financial support of investments that can be patented by EU, the cost of a patent currently exceeding the resources of a medium institution;

j) the common strategic framework should contribute to creating a world class science base in the EU, and therefore it must take into account programs that support research and innovation and that function across Europe with good results, also to use their experience and results such as EUREKA-European initiative in advanced technologies.

2. How should EU funding best cover the full innovation cycle from research to market uptake/marketing?

The Senate considers that:

a) the full cycle of solving economic and /or specific social commands should be addressed, the command generated by the utilization/commercialization market, taking into account the dynamic evolution of the real market demand;

b) it takes research tools specific to each area of research;

c) the basic research, pre-competitive should be funded upward (bottom-up), dedicating at least 40% of public funds on the basis of scientific excellence, pursuing the idea of the quality of the research team, of the results in the form of papers and patents, etc.;

d) for applied research oriented, competitive, which may take place both in the ascending mode (bottom-up), taking into account the research that lead to product or technology type applications, and in the descending mode (top-down) applications taking into account market requirements or company unfulfilled, but for which there is sufficient knowledge to put into practice, financing the public should be about 30%, with explicit financial commitment from potential beneficiaries, especially in If homework system launched in descending (top-down) and the results will be patents, registered as such products and technologies;

e) should technological development and technology transfer to be given a maximum of 10% public funding, with majority financial participation from the private sector directly concerned;

f) should the lack of entrepreneurship and financial measures to be solved us tax, long term, by creating specific educational modules and short term, by attracting the entrepreneurial diaspora in countries like U.S. and Japan.

The Senate proposes:

a) creating databases with inapplicable results obtained in research projects;

b) creating at European level, tools supporting it financially and logistics entities that will retrieve, apply and develop the results with great Coverage, still not implemented;

c) organization in Europe, a campaign to promote clusters on priority areas for the recent EU member;

d) grant support from the EU increased from 50% to 75%.

3. *What are the characteristics of EU funding that maximize the benefit of acting at the EU level? Should there be a strong emphasis on leveraging other sources of funding?*

The Senate believes that the benefits of action at the EU level can be increased to a maximum by:

- a) incentive funding through grant support and formative financing by strengthening community spirit;
- b) safety funding at the level established by the evaluators, providing an advance of 90% of the project's value;
- c) continuity in ongoing projects which don't depend on annual budgets;
- d) correlation of investments in research and innovation;
- e) the utility of funding for large communities;
- f) supporting funding programs at the EU level through coherent national programs, by correlating the objectives at European level with the objectives and interests of the corresponding actions at national level and also among different social categories of economic and social operators;
- g) the optimal correlation between national and European investment in research / innovation;
- h) supporting the allocation of a certain percentage of GDP for research and innovation, supported by common EU policies, reaching a comparative level.

The Senate considers that:

- a) it is necessary to mobilize national public and private resources in different frameworks of cooperation together with the imposition of multi-annual budgets and the creation of policies to stimulate the research -development -innovation activities (RDI), in conjunction with those belonging to the financial and tax domains;
- b) it is also necessary to attract funding sources from the private sector, both as direct funding of interest research in a company or another, as well as scholarships and grants;
- c) large companies should be encouraged to set up foundations that give research grants based on competition, on topics of interest for further development of the company;
- d) sources of funding should be diversified as much as possible, in order to allow any researcher to check its potential and ideas by competing with other researchers.

4. *How should EU research and innovation funding best be used to pool Member States resources? How should Joint Programming Initiatives between groups of Member States be supported?*

The Senate believes that the pooling of national programs and initiatives specific to each state could be achieved by developing and supporting cluster initiatives, through which each partner state can participate with the best expertise to develop a product or a technology, which is of major interest to the European market.

The Senate considers that:

- a) the development of common policies on pan-European interest objectives;
- b) establishing priorities by European policy, priorities which become mandatory for all member states at national level (education, research and innovation, etc.);
- c) expanding cross-border initiatives and those of ERANet type;
- d) stimulation groups of states that promote joint programs by additional funding.

5. *What should be the balance between smaller, targeted projects and larger, strategic ones?*

The Senate does not consider appropriate the programming of a proportion between the smaller, specialized projects, and large, strategic issues, whereas the financing of projects should

be determined primarily by their novelty, feasibility and effectiveness and also by the applicability and usefulness of the results. Each type of project has its own specifics, and the socio-economic effect of these projects is different. Small projects can contribute to both technological and economic development, by the SME-s involved. These types of projects can be specific to national or inter-regional programs. In contrast, the strategic projects could be implemented at regional or European level. They have a microeconomic level impact. Usually, the consortia of such projects include large companies with financial strength and outstanding logistics.

6. *How could the Commission ensure the balance between a unique set of rules allowing for radical simplification and the necessity to keep a certain degree of flexibility and diversity to achieve objectives of different instruments, and respond to the needs of different beneficiaries, in particular SMEs?*

Senate considers that it would be useful to have a standardized set of administrative rules issued by the Commission, and flexibility should come from the use of funds, from adopting and implementing rules and its own accounting practices, especially those relating to WATT, public procurement and payment.

7. *What should be the measure of success for EU research and innovation funding? Which performance indicators could be used?*

Given the European Commission's Communication "EUROPE 2020 A strategy for smart, sustainable and inclusive growth", the Senate believes that a primary set of performance indicators could be based on the degree of contribution to the achievement of this strategy's objectives.

Other indicators that the Senate proposes are:

- a) indicators of academic performance in terms of the number of published papers in ISI scientific journals, number of citations, according to the ISI Web of Science system, the ISI journals impact factor ;the number of published patent requests , the number of granted patents, the number of citations of patents;

- b) performance indicators in terms of economic effects of research: the number of patents applied, new jobs created, number of spin-off-s created, other evidence of economic, environmental, social, and industrial effects and number of industrial resulting applications , the market demand for the generated product, reducing human impact on the environment etc.;

- c) the development of science and technology parks where they can carry out post-graduate training, the internship on trade and productive business incubators, could increase the success rate of CDI applications .

8. *How should EU research and innovation funding relate to regional and national funding? How should this funding complement funds from the future Cohesion policy, designed to help the less developed regions of the EU, and the rural development programmes?*

Senate proposes:

- a) creation of instruments for financing in priority projects of research / innovation, coordinated by advanced countries of the EU with partners from less developed regions, whose results will be applied in these countries, to reduce the gap. These tools should be supported at national level and co-financed as a priority;

- b) co-financing contracts in real time and the compliance of research contracts on global sum and results, as well as responsibility for failure to meet the similar contractual debts from state and researchers;

- c) double funding, regional and community should be avoided for similar objectives. Regional funding should pursue specific objectives. National development programs for medium and long term should be adopted so that the cohesion funds would supplement national funds effectively.

II. At the subparagraph 4.2., entitled *Tacklin societal challenges*, the answers to questions from 9 to 13 are:

9. *How should a stronger focus on societal challenges affect the balance between curiosity driven research and agenda-driven activities?*

The Senate considers that the activities resulting from programs established by european / national strategies are to be found in small, specialized projects, with immediate application, economic and social development engine by SMEs. Applied DIY – type research can be supported also by hedge funds of banks. Research driven by curiosity should be reflected in basic research, with funds specially allocated. It should define high-risk projects and have access to unique infrastructures. The research driven by curiosity should relate to a top European theme.

10. *Should there be more room for bottom-up activities?*

The Senate considers that more attention should be payed to rising activities, because they identify best real challenges that the society is confronting with and best exploit the huge imagination, ideas and creativity human potential.

11. *How should EU research and innovation funding best support policy making and forward-looking activities?*

The Senate believes that a special fund from the EU budget should be set up, maybe a percentage of the contribution to the EU research fund of the State, of which, after the EU methodology, to organize projects auctions at purely national level land on national issues. Also, the Senate believes that stimulating collaborative schemes and programs at regional and community level could contribute to a more effective application. The funding of research and innovation in the EU must be based on the development of bilateral and multilateral relationships, national and international in order to identify best practices and their implementation.

12. *How should the role of the Commission's Joint Research Centre be improved in supporting policy making and addressing societal challenges?*

The Senate believes that the role of the Commission's Joint Research Centre should be improved by:

- a) representation of this center in each Member State;
- b) a more efficient communication and interaction with actors in society who are the beneficiaries of the activity of this center;
- c) to promote scientific exchanges between universities and institutes in the EU;
- d) development of proactive policies, including fiscal, technology transfer support;
- e) identifying and supporting peak areas with performance potential.

13. *How could EU research and innovation activities attract greater interest and involvement of citizens and civil society?*

The Senate proposes:

- a) real consultation of citizens in the development of public policy for research and innovation;
- b) a policy of active promotion at social level of the research products and their effects on increasing the quality of life;
- c) creating contact structures with press at the level of research establishments to ensure accessible communication with citizens;

- d) education, by implication, the development of educational programs and small research projects by universities and research centers for students;
- e) implementation of the concepts of "open doors", "science days", "night of research", etc.;
- f) organizing fairs, exhibitions, pilot actions, which are referred to the conduct of demonstrative activities in the community.

III. At the subparagraph 4.3., entitled *Strengthening competitiveness*, the answers to the questions from 14 to 20 are:

14. How should EU funding best take account of the broad nature of innovation, including non- technological innovation, eco-innovation and social innovation?

The Senate considers that funding projects of non-technological innovation, eco-innovation and social innovation should take into account:

- a) the right to knowledge, which is important in building civil society, being an essential part of eco and social innovation. We have to admit the role of civil society in implementing sustainable development and promoting public-private-NGO partnerships;
- b) clearly definition of the terms non-technological innovation, eco-innovation and social innovation;
- c) evaluation of the effects of funding such projects should provide clear evidence of progress in integrating environmental protection and sustainable development in development policies and activities.

15. How should industrial participation in EU research and innovation programmes be strengthened? How should Joint Technology Initiatives (such as those launched in the current Framework Programme) or different forms of 'public-private partnerships' be supported? What should be the role of European Technology Platforms?

The Senate believes that the participation of industry in research and innovation EU policies depends on the harmonization of interests and the complementarity of the guidelines and of the objectives of the companies' own programs of research and innovation with the EU programs. Meetings and diversified topics of interest for research and industry entities should be intensified. After establishing common priorities for society and industry, joint research funding can be made. The encouragement of the industry participation in research projects can be achieved only through adequate funding, which enables SMEs to make acquisitions, to commit funds with preferential rates to support co-financing, but especially by taking account of the existing economic reality .

The SMEs involved in research projects should be financially encouraged, they should also receive certain discounts for limited periods and subject to performance and results. In addition, SMEs should be financially helped to introduce ISO standardization of their products to allow EU entry. Regarding public-private partnerships, the Senate believes that they should be defined on the principle of shared responsibility, but differentiated responsibilities and the terms of financing should reflect the real economic situation. The participation of a SME in a research project should not lead to excessive costs. The contracts and terms of financing should also be thought so that a contracted project to be 100% done, without interventions to cut off the funds, provided that the partners meet their agreed targets.

The Senate considers that European Technology Platforms in a specific area should contribute to:

- a) identifying and developing specific technologies on the production chain, with maximum economic efficiency and positive impact on the environment;
- b) creating a strong industry and accelerating its development in EU countries, by targeting and promoting research in this field, through best practice activities, promotion and demonstration;

c) the process of research and innovation policy analysis and elaboration in which there should be co-opted representatives of joint technology initiatives.

16. How and what types of Small and Medium-sized Enterprises (SME) should be supported at EU level; how should this complement national and regional level schemes? What kind of measures should be taken to decisively facilitate the participation of SMEs in EU research and innovation programmes?

The Senate considers that:

a) the concrete way of supporting the SMEs should be linked to the regulations regarding state aid that are unitary both at EU and national level;

b) State aid schemes at national and regional levels should be filled with activities that include non-technological innovation, eco-innovation and social innovation;

c) support is needed for completion and submission of financing requests by simplifying procedures and the use of clear terms regarding financing, in order to eliminate situations such as: project won in the EU but unsubsidizable in the national scheme. It should be clearly defined the concept of "Managing Authority" for each program so that clear and relevant information could be provided in real time;

d) it would be useful to create regional associations on areas of technology, bringing together funds for research;

e) all types of performant SME should be supported;

f) the participation of SMEs in research and innovation programmes should be encouraged through the introduction of associated financing instruments, consisting of equity, grants of EU funds and venture capital;

g) there should be established a project evaluation system as transparent as possible and which takes into account the value of the idea, to fund the product, not the company.

To decisively facilitate the participation of SMEs in research and innovation EU policies, the Senate proposes:

a) financially encouraging the participation in these types of projects, and accelerating discounts for the expenses incurred;

b) governmental structures to promote "government-banks" partnerships, to simplify the comfort letter type credits.

17. How should open, light and fast implementation schemes (e.g. building on the current FET actions and CIP eco-innovation market replication projects) be designed to allow flexible exploration and commercialisation of novel ideas, in particular by SMEs?

The Senate considers that the implementation schemes should be based more on cooperation between the SME (small and medium enterprises) associations and the structures / organizations of research and development. Joint examination of the requirements / issues on the market by producers of goods and services and generators of ideas, contribute to more accurate diagnosis and determination of the treatment or solution most appropriate.

The Senate proposes:

a) the retrieval of money by SMEs, in a stage should be as short as possible;

b) abolishing the bureaucracy and simplified forms of reporting;

c) developing a database of research comprising results of all European research;

d) financial support through projects for SMEs that want to apply them, and, if necessary, partial payment of the patent or license by the EU and/or Romania.

18. *How should EU level financial instruments (equity and debt based) be used more extensively?*

The Senate considers that the use of financing instruments based on equity and loaning is attractive because it better meets the users' interests at a time and under the conditions of the balance between the risk assumed and the expected benefits, combined with a stimulating interest policy. Currently, co-financing is quite high, and borrowing from banks is not a viable solution, in current terms.

One of the SMEs' problems is that EU projects are not encouraging at all the acquisition of research equipment that would help, the development of the SMEs in the future. The existence of entities to help them achieve their financial plans and make impact studies on the payback time would be desirable.

19. *Should new approaches to supporting research and innovation be introduced, in particular through public procurement, including through rules on pre-commercial procurement, and/or inducement prizes?*

The Senate believes that research and innovation should be encouraged to generate solutions appropriate to the problems of the economy and society. It would be helpful to set up risk funds allocated to research, to support the capitalization of the results of research and innovation activities and to ensure financing to SMEs in research projects. Public procurement is very important to stimulate innovation.

20. *How should intellectual property rules governing EU funding strike the right balance between competitiveness aspects and the need for access to and dissemination of scientific results?*

The Senate considers that the results of research and innovation activities financed from EU funds should be accessible to all citizens and business operators in Member States. There should also be developed clear and uninterpretable rules on intellectual property right of all project results, based on which to address issues of competitiveness, access to and dissemination of scientific results. It would be helpful to set up a body at EU level on intellectual property protection.

IV. At the subparagraph 4.4., entitled *Strengthening Europe's science base and the European Research Area*, the answers to questions from 21 to 27 are:

21. *How should the role of the European Research Council be strengthened in supporting world class excellence?*

To strengthen the role of the ERC, the Senate proposes the following measures:

- a) increased skills for identifying, evaluating and selecting centers/poles of excellence and putting the skills and tools necessary for using these powers at ERC's disposal;
- b) funds provided by the EU, Member States and regional level and the hedge funds created by commercial banks;
- c) sustain the support activities by increasing the funds allocated to grant specific programs that include these types of activities, such as the FP7 program- *Regions of Knowledge, Research Potential*;
- d) establishing and implementing of financial incentives for outstanding scientific results;
- e) identifying the experts and creating, in areas of common interest, structures such as institutes / research centers at EU level, with mixed virtual / real structure; each expert will work in the country of origin, with internships in other countries and laboratories and sessions at the institute's headquarter;

- f) establishing of grants for research groups, possibly in the field of basic research partnerships;
- g) promoting the engineering science, such as the National Technical Academies.

22. How should EU support assist Member States in building up excellence?

For the EU support to assist Member States in building up excellence, the Senate propose the following measures:

- a) creating an attractive framework for recognized personalities, capable to develop and promote excellence, avoiding situations in which Nobel laureates choose to work in U.S. laboratories;
- b) reducing disparities between Member States in the CDI by political decisions, such as placing large infrastructures in less developed countries;
- c) identification and assessment of centers of excellence and complementary funding of their activities, correlated with the corresponding national funding level of excellence resulted from the evaluation;
- d) stimulate research and innovation properly;
- e) supplementation of regional support programs, for example FP7-Regions of Knowledge Research Potential, which aim to reduce disparities between the scientific and technical European research centers;
- f) funding the research and development centers in universities and SMEs, in order to provide the technological infrastructure for industrial use;
- g) connecting national industries with the technological platforms created by the European Union, by co-financing an European research institute in one of the areas of EU interest included.

23. How should the role of Marie Curie Actions be strengthened in promoting researcher mobility and developing attractive careers?

The Senate proposes the following measures in order to strengthen the role of Marie Curie Actions:

- a) expanding the Marie Curie actions at the level of the seniors, with some imposed limits;
- b) increasing the exchanges between industry and academia, which can facilitate the mobility and the training for more attractive careers;
- c) evaluation marks for the forming/employing entities in projects competitions, such as providing a score to the forming entities that employ trained specialists in the Marie Curie actions;
- d) enabling the mobility at the national level, in order to develop tools accessible for reintegration, especially for the Eastern Diaspora;
- e) encouraging projects who imply such mobilities.

24. What actions should be taken at EU level to further strengthen the role of women in science and innovation?

To further strengthen the role of women in science and innovation, the Senate proposes the following actions:

- a) changing through education the attitude towards the promotion of women;
- b) imposing a percentage for women's participation in European funded projects and through national recurrence;
- c) involving women in bodies responsible for the coordination of the activities related to the strategy, on medium and long term;
- d) actions to stimulate the exchange of experiences and best practices for each level of the groups, including those of women- scientist.

25. *How should research infrastructures (including EU-wide e-Infrastructures) be supported at EU level?*

The Senate proposes the following actions in support of research infrastructures:

- a) assumption of costs for researchers' access to these facilities, as a mobility, as well as like a financial effort of the manager, based on scientific projects of interest;
- b) sustaining the support activities, by increasing funds allocated to finance specific programs that include these types of activities;
- c) promoting technology transfer from academic units to industry through cooperation between companies and research programs;
- d) consortia made up of industrial companies and research institutes for joint development of competitive technologies;
- e) funding research and development centers in universities in order to establish the technological infrastructure for industrial use;
- f) launching of competitions for projects, that should take into account the use of research infrastructures.

26. *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 Senate considers that the following actions should be initiated in order to support the international cooperation with non-EU countries or with Member States:

- a) adding specific programs and partnerships between EU countries and states such as USA, China and Russia that exist at FP level, with clear definition of areas of strategic interest in the short, medium and long term;
- b) involving third countries in the EU research community by establishing programs that can leverage existing skills in these countries;
- c) creating a single patent body at European level, with representation in each Member State and / or state wishing to join this body. Thus, any member of the European community where the patent was granted, will have European recognition;
- d) supporting all/part of the costs for protecting intellectual property would be desirable;
- e) reduce customs duties for equipment technically more improved than that existing in the EU which can be used in the project;
- f) opening of EU research infrastructure;
- g) financial support for the use of research infrastructures in the EU countries in joint programs.

27. *Which key issues and obstacles concerning the ERA should EU funding instruments seek to overcome, and which should be addressed by other (e.g. legislative) measures?*

The Senate considers that the economic risk, tax risk, low ratio between risk - efficiency, limited resources of technology transfer organizations, fragmented and inefficient market, the unrealistic goals of entrepreneurs, low management capacity are the main impediments when it comes to financing the activities of research and innovation. EU financial instruments should takeover a part of the risk and they should be oriented towards realistic projects based on scientific excellence and increased management capacity

Bureaucracy should be reduced significantly, and the focus should be on the knowledge generated through research, and the economic aspects must be supported, to the extent that these give to the society the obtained benefits.

The frameworks for cooperation that require national funds may be undermined by national policies in this area, so should be imposed rules very clear, binding all Member States participating in such initiatives.

Solving problems related to free movement is likely to facilitate certain issues related of a common space of research at EU level. Each EU Member State should act to create an own areas of research, to the harmonize interests, to correlate the efforts and avoid the fragmentation between different areas / communities, which conducts research and innovation. These areas of national research could be structural elements of the system, interconnected and interrelated the European Research Area.

President
Mircea Dan GEORGANĂ

A handwritten signature in black ink, appearing to read 'Mircea Dan GEORGANĂ', written over the printed name.