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on the Green Paper: From challenges to opportunities: towards a common strategic framework for EU research and innovation funding
(2011/XXXX(INI))

Committee on Industry, Research and Energy

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MOTION FOR A EUROPEAN PARLIAMENT RESOLUTION

on the Green Paper: From challenges to opportunities: towards a common strategic framework for EU research and innovation funding (2011/XXXX(INI))

The European Parliament,

- having regard to the Treaty on European Union (TEU) and the Treaty on the Functioning of the European Union (TFEU), in particular the articles relating to research,
- having regard to the Commission Green Paper ‘From Challenges to Opportunities: Towards a Common Strategic Framework for EU Research and Innovation Funding’ (COM(2011)0048),
- having regard to its resolution of 20 May 2010 on the implementation of the synergies of research and innovation earmarked Funds in Regulation (EC) No 1080/2006 concerning the European Fund of Regional Development (*sic*) and the Seventh Framework Programme (FP) for Research and Development in cities and regions as well as in the Member States and the Union¹,
- having regard to the report of the Committee of Experts ‘Towards a world class Frontier Research Organisation – Review of the European Research Council’s Structures and Mechanisms’ of 23 July 2009,
- having regard to the report of the Group of Independent Experts ‘Mid-Term Evaluation of the Risk-Sharing Financial Facility (RSFF)’ of 31 July 2010,
- having regard to its resolution of 11 November 2010 on simplifying the implementation of the Research Framework Programmes²,
- having regard to the final report of the Expert Group ‘Interim Evaluation of the 7th Framework Programme’ of 12 November 2010,
- having regard to the Commission communication of 9 February 2011 entitled ‘Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the Response to the Report of the Expert Group on the Interim Evaluation of the 7th Framework Programme for Research, Technological Development and Demonstration Activities and to the Report of the Expert Group on the Interim Evaluation of the Risk-Sharing Finance Facility’ (COM(2011)0052),
- having regard to the conclusions of the Interim Evaluation of the Seventh Framework Programme for Research Activities (FP7), including the risk-sharing finance facility, by the 3074th EU Council meeting on competitiveness (Internal Market, Industry, Research and Space) of 9 March 2011,

¹ Texts adopted, P7_TA(2010)0189.

² Texts adopted, P7_TA(2010)0401.

- having regard to its resolution of XXXX on innovation Union: transforming Europe for a post-crisis world¹,
 - having regard to its resolution of XXXX on the interim evaluation of the seventh EU programme for research, technological development and demonstration²,
 - having regard to Rule 48 of its Rules of Procedure,
 - having regard to the report of the Committee on Industry, Research and Energy and the opinions of the Committee on Foreign Affairs, the Committee on Budgets, the Committee on the Internal Market and Consumer Protection, the Committee on Regional Development, the Committee on Agriculture and Rural Development and the Committee on Fisheries (A7-0000/2011),
- A. whereas, based on the budget review, the European Commission has decided to launch a debate to improve the efficiency of research and innovation funding at national and EU levels,
 - B. whereas the EU has established the objective of increasing spending on R&D to reach 3 % of EU GDP by 2020,
 - C. whereas the current trends show strong pressure to freeze or even reduce the European budget associated with a period of severe constraints on national public budgets, and whereas R&D&I is one of the areas where European cooperation has been shown to have real added value, showing the need to reallocate the EU's available resources,
 - D. whereas we are currently experiencing an economic and social crisis (which is affecting EU Member States in very different ways), and whereas research, education and innovation are crucial instruments for both economic recovery and job creation, as well as for the definition of a sustainable and inclusive growth model,
 - E. whereas other regions and countries of the world are increasingly investing in R&D&I, and whereas EU investment in this domain should therefore be oriented towards a reinforcement of scientific capacity and an improvement in overall EU competitive capacity,
 - F. whereas, although EU funding for R&D&I has been increasing, scientifically and technologically more developed EU Member States (MS) still absorb the greatest slice of the available resources under the various funding schemes and programmes (including large-scale projects), perpetuating the under-representativeness of some MS and European regions in terms both of access to funding and of participation,
 - G. whereas there are still inequalities within the EU in terms of national levels of R&D funding capacities, industrial structures and higher education systems,
 - H. whereas the great importance of SMEs for the EU economy and employment is not mirrored in their level of access to EU R&D&I funds,

¹ Texts adopted, P7_TA(2011)0000 (A7-0162/2011 – to be adopted in plenary in May).

² Texts adopted, P7_TA(2011)0000 (A7-0160/2011 – to be adopted in plenary in June).

1. Welcomes the European Commission Green Paper defining a Common Strategic Framework (CSF) for funding in research and innovation, and considers that the new CSF core should be the articulation of the EU research programmes and funding schemes;
2. Takes the view that EU research funds and programmes and the Structural and Cohesion Funds have different aims and, as such, should be kept separate, although on a complementary basis;
3. Draws attention to the importance of maintaining convergence policies, and asks the Commission to build stairways to excellence for those MS and regions that are underrepresented in the FP by developing appropriate instruments to intensify cooperation between MS with a strong participation and those with a weaker participation, and to substantially increase human capacity building and infrastructure in the latter;
4. Recalls that although excellence is considered the main general criterion for funding, it must be borne in mind that the nature of excellence differs with the type of participant or the very nature of the research and innovation project (the excellence criterion for a research institution is not the same as for an individual researcher or for an SME, and also differs between fundamental and applied projects);
5. Calls for a better articulation between local and regional, national and European research and innovation strategies, respecting the specificities of the different contexts and, at the same time, reinforcing the possibilities for complementarity and cooperation between them; believes that sharing information and results is of key importance here;

Towards a new Common Strategic Framework (CSF)

6. Underlines the fact that at the core of the CSF should be the idea that the differing nature and scale of R&D&I projects, together with the multiplicity of funding schemes, must be organised in such a way that coherence, articulation and complementarity are ensured;
7. Is convinced that different tasks within the CSF should be tackled separately but in close articulation: the European Institute of Technology (EIT) to operate mainly as a network of Knowledge and Innovation Communities (KICs) the Competitiveness and Innovation Framework Programme (CIP) to concentrate on its strength in supporting innovative SMEs and therefore not necessarily to be included in the next FP; the next FP to embrace research as a whole; and the structural/cohesion funds to be used in closer cooperation but kept separate;
8. Calls for clarification, simplification and reorganisation of the different EU programmes and instruments in existence, for a clear definition of the overall funding system, and for the EU research and innovation programmes budget for the next financial period to be doubled as of 2014 (excluding the budget devoted to Structural Funds and the EIB) as the appropriate response to the current economic crisis and to the great shared challenges; suggests, therefore, a new organisational model based on three different layers of funding aimed at stability and convergence:

1st Layer: Capacity building and infrastructure

9. This layer covers the EU funds associated with infrastructure (in the wider sense, including the institutional one) and capacity building;
10. The funding scheme within this layer includes the funding provided through the EIT, the part of the FP concerning the Capacities Programme and Marie Curie initiatives, the European funding components of large-scale projects, access to loans by the EIB (covering projects over EUR 50 million), grants associated with the above-mentioned components of the FP, and cooperation with Structural Funds associated with infrastructure;
11. Stresses the need to fund large-scale projects, such as ITER, Galileo and Global Monitoring for Environment and Security (GMES) outside the FP, creating autonomous budget lines for them, in order to guarantee a transparent and reliable financing structure; suggests that they should be partially funded through the issuing of project bonds by the EIB;

2nd Layer: Potential and consolidation

12. This layer is the space for overall research, fundamental and applied, and social sciences and humanities; coordination participants are universities and research centres/institutes, although the industrial sector should be encouraged to participate;
13. The key words here are originality, quality and potential of projects, and not only the possible marketed results;
14. The funding scheme within this layer is covered by the EU FP grants system and cooperation with Structural Funds associated with R&D&I;
15. Recalls that the European Research Council (ERC) has proved to be successful and a strengthening element of the European Research Area (ERA); stresses the need to increase the proportion of the budget dedicated to grants to young researchers, as well to strengthen Marie Curie actions and initiatives, thus reinforcing mobility; calls for the implementation of the necessary measures to cope with the precarious conditions of scientific workers in the EU as a means to attract and retain researchers, bearing in mind that precarious working conditions (which are still more prevalent for women) constitute a bottleneck on the way to achieving excellence in Europe;

3rd Layer: Market and innovation towards common goals

16. This layer is the space for marketing of products and services and generation of public wealth; innovative SMEs play a pivotal role here in developing novel products and services;
17. Recognises that particular attention should be devoted to SMEs' involvement, in

order to enable the exploitation of new ideas and opportunities in a flexible and effective way as they emerge, opening new avenues for innovation;

18. The funding scheme within this layer is covered by EU funding associated with CIP, access to credit enhancement by the EIF and specific loans from the EIB (mainly covering projects under EUR 50 million), and cooperation with the Structural Funds associated with entrepreneurship; additionally, suggests the creation of a new funding instrument – the EU SME Bank – which should act in articulation with national contact points and financial institutions designated by the MS;
19. Believes that the ERA would greatly benefit from the creation of an EU SME Investment Bank in order to reinforce the EU's innovation policy covering the missing link: the weak participation of SMEs in EU programmes;
20. Stresses that increased participation by SMEs needs appropriate funding instruments that respond to their specificities, including an increased margin of the tolerable risk of error; within this scenario soft loans should be considered, which are reimbursed in the event of success, excluding administrative costs;

21. Takes the view that not all innovation is research-based and that not all research has innovation as its goal; believes in consequence that the proposed reorganisation should cover the full innovation cycle, from concept to market, including non-technological, eco- and social innovation;
22. Recalls that the very competitive nature of scientific, technological and innovation work and the maintenance of local scientific and innovative capacity building depend on the existence of some level of duplication and fragmentation, without which collaborative research would be undermined;
23. Strongly encourages the implementation of training programmes for all potential participants, particularly on the application of management rules, and calls on the Commission to develop criteria for the selection, evaluation and assessment of projects, bearing in mind the stairways to excellence;

Some guidelines for the next Framework Programme

24. Favours moving towards a 'science-based' approach and calls for a trust-based and risk-tolerant attitude towards participants at all stages of the funding system;
25. Calls for the Cooperation Programme to be kept at the heart of the FP, reinforcing collaborative transnational research;
26. Calls for consolidation of multidisciplinary research and recognition of the social dimension of research; in this context, recalls that great societal challenges (such as climate change, demographic ageing and resources sustainability) cannot be dealt with only through technological responses and that therefore European research in social

sciences and humanities is a pivotal asset in successfully addressing them;

27. Calls for a balance to be kept between bottom-up (cooperative) and top-down projects ('great societal challenges'), as well as for smaller bottom-up projects to be facilitated;
28. Calls for an intensification of international cooperation through effective reinforcement of capacity building and the establishment of fair partnerships with developing countries in order better to tackle global challenges;
29. Instructs its President to forward this resolution to the Council and the Commission.

EXPLANATORY STATEMENT

1. Context

The Commission has taken the initiative of publishing a Green Paper that seeks to lay down a common strategic framework for research and innovation funding after 2013, combining the European programmes – namely the Research Framework Programme (FP), the European Institute of Technology (EIT), and the Competitiveness and Innovation Framework Programme (CIP) – with the structural/cohesion funding allocated for research and innovation.

Proposing a common framework encompassing all of the funding schemes and programmes, notwithstanding the inequalities in terms of financing and the firmness of their position within the European context, offers, to my mind, an opportunity to strengthen the European Research Area and devise an approach enabling this consolidation to be effectively dovetailed into a clear-cut convergence strategy.

In this report I am proposing that the existing schemes and programmes be reorganised with a view to tackling the challenges that Europe has to face. In addition, to deal with specific cases, I believe that a new agency should be set up – a European Small and Medium-Sized Enterprise (SME) Investment Bank – and project bonds used to complement the framework put forward by the Commission.

The approach set out here aims first and foremost at stability and convergence. No joint strategy will stand a chance of succeeding if we keep on ‘moving the goalposts’ at every turn. Whatever strategy we adopt in response to our current economic and social situation, investment in research, development, and innovation cannot be considered a certainty for as long as access to the European funding available remains beset by inequalities and intrinsically skewed.

2. The structure and its supports

Europe’s aggregate investment in research, development, and innovation has not been commensurate with its status as the richest region in the world. The United States, Japan, and, for that matter, the BRIC countries have been investing on a larger scale. The total volume of European investment has admittedly risen in recent years, but that fact has not made Europe more cohesive. The very substantial inequalities among the Member States make themselves felt in two main ways. Firstly, scientifically and technologically more advanced countries are continuing to derive greatest benefit from the Europe-wide programmes. The evidence can be seen in, for example, the ‘top 50’ lists of recipients of FP7 funding, which show that, where both academic institutions and industry are concerned, the new Member States and outlying economies continue to be severely underrepresented, not to say completely excluded. Secondly, investment varies enormously from one country to the next. Although Europe’s declared target is to increase overall investment to 3% of GDP by 2020, only 6 countries at present invest more than 2% of their GDP in research and innovation (Austria, Denmark, Finland, France, Germany, and Sweden); in 10 countries investment is less than 1% of GDP and in 11 others it ranges between 1% and 2%. When the criterion applied is investment per capita, the highest ranked countries are those with the highest rates of investment. Measured against this yardstick, some countries – Luxembourg, for example – rise to the top of the rankings even though their investment, both in absolute terms and as a percentage of GDP, is

more modest. The new Member States and outlying economies area again rank near the bottom.

Given the present state of Europe, in which inequalities are mounting, the aim must be to move closer to those in a stronger position and intensify cooperation. To that end, cohesion funding must play a complementary role within the common framework while still being treated as a separate entity.

The approach being put forward in this report seeks to ensure that the common framework allows for the fact that knowledge should not be viewed so narrowly, that is to say, purely as a potentially marketable asset, as to neglect its importance to the public good. The premiss should be that innovation does not result entirely from research, any more than research has to translate invariably into innovation. What is needed is to provide a basis on which to link together the resources available with a view to producing a framework making for coherence in the relationships established between the sources of financing and the nature and scale of projects. The social dimension and impacts of research and innovation also need to be taken into account, and studied, given that we cannot bring effective action to bear when we are not familiar with the societies at which it is aimed.

No matter what we might think of the industrial project as such, Airbus is a case in which Europe has emerged manifestly stronger in the fields under discussion here. What is involved is a highly innovative long-term project pooling a variety of resources that has managed to establish itself in the global context as a success story. The success of the Commission's proposed reworking will depend on the ability to dovetail projects of the kind described above with projects of other types conceived on another scale, maximising cooperation without ignoring or erasing distinctive local or regional and national features.

3. The Post-it effect

In 1968 Spencer Silver developed a special kind of reusable adhesive that stuck without leaving marks. Precisely because of those characteristics the product flopped. For five years Silver attempted to demonstrate the advantages of his invention, but to no avail. It was only in 1974 that Art Fry, a member of a church choir, decided to start using his friend's 'dud' adhesive because he was fed up with dropping his bookmarks whenever he wanted to open his hymn book on the desired page. Spencer Silver's invention was not launched as a product until 1977 and it penetrated the market just a year later. Today we know what Post-it notes are and are aware of their success. But all this took ten years to happen. It is plain to see from the Post-it example that funding must not be confined to innovations or projects offering a guarantee of immediate success.

That is why it is so vital to have the ability to draw clear distinctions in terms of the nature of support and projects, whether support is to be channelled towards networks or projects whose object is to strengthen infrastructure in need of consolidation, and for which established support systems are already in place, or towards capacity-building or research projects. The ability to make distinctions is what enables us to combine individual parts into a strategically coherent whole. The example above also demonstrates the need to conceive of a joint effort extending beyond the short and medium term.

Progress towards excellence in every sense of the word – the criteria depend on the actors under consideration – will be impossible unless the necessary resources are earmarked (that is why the volume of investment needs to be increased substantially) and resolute steps are

taken to simplify the procedures and cut the cost of red tape and administrative overheads. Because of the continuing problems, it often happens that what is rewarded is the excellent wording of proposals rather than the excellence of the proposals per se. The two conditions set out above consequently have to be fulfilled in order to widen the geographical diversity and the range of participants in European programmes. Furthermore, no progress can be made in this direction without taking into account the great number of scientific disciplines, the varied nature of innovation, the scope for originality and, if need be, the possibility of failure, the social role of science and innovation, and the time to be allowed for the necessary consolidation, depending on the types and scale of the projects involved.

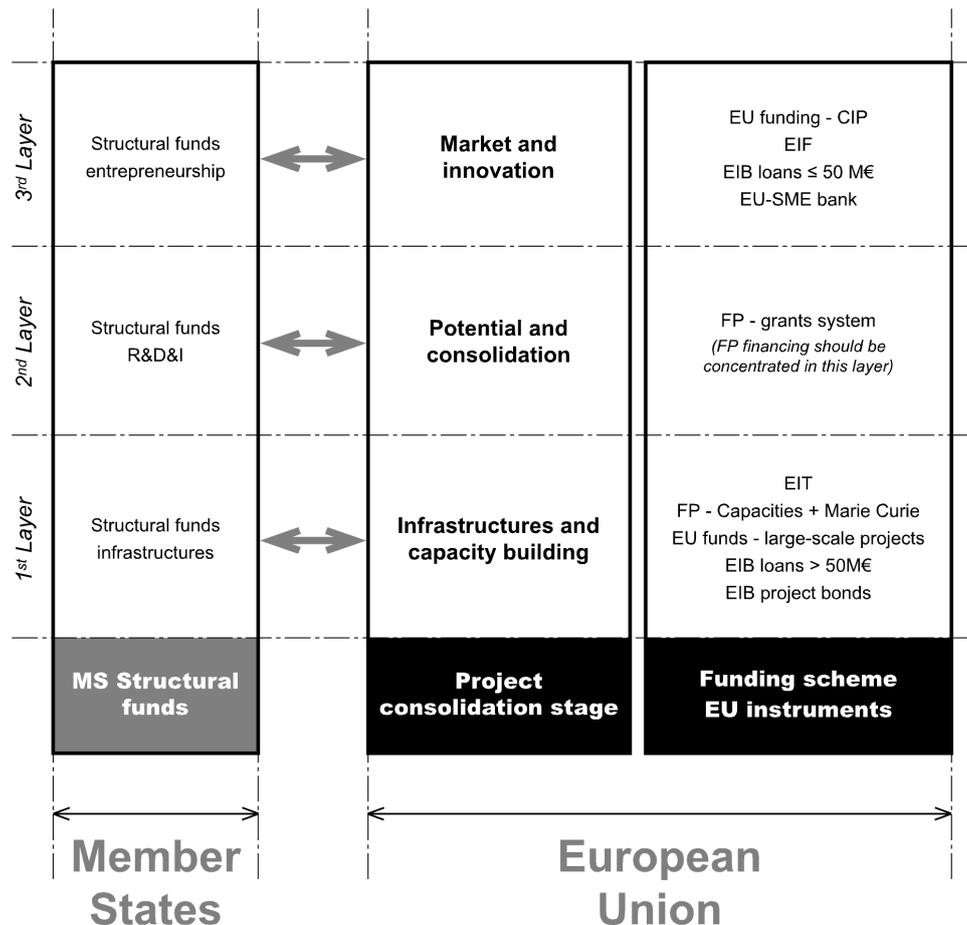
Finally, it is essential to provide the means of striking a balance between projects to meet great societal challenges and bottom-up projects so as to afford scope for curiosity, which has a crucial part to play in consolidating scientific activity. The Post-it example also serves to remind us that even though the market might not be the ultimate goal of knowledge production, excellent market opportunities can sometimes arise out of the blue.

4. The Europe that we have

This report is attempting to reorganise the existing schemes and programmes and provide for new schemes with a view to producing a strategy to benefit stakeholders in overall terms. Research and innovation should be considered a sine qua non for consolidating any growth strategy seeking to be sustainable and inclusive. A commitment along those lines is particularly important in view of the present economic and social crisis.

Strengthening convergence and consolidating the EU's global competitiveness – which should be based on a cooperation model – are among the ways to achieve economic recovery and bring about a development model based on sustainable growth and job creation.

Within the Europe that we have there are many differences in terms of scientific and technological capacity and the industrial fabric of individual countries. There is, however, one common element: the largest portion of European industry and the one that contributes most to employability consists of small and medium-sized enterprises. More and more arrangements have accordingly been devised in recent years with a view to securing their wider involvement. However, the increase in number has not had the desired effect, and this is one of the weaknesses of the present framework. The lack of involvement is due to some extent to the fact that the existing schemes are better suited to academic institutions and large companies. It is therefore necessary to ensure that the existing schemes and programmes do not apply the same treatment to things which are by definition unlike. With that end in view I have proposed a triple-tiered model, illustrated in the diagram below.



To give an example, as far as an academic institution is concerned, the results of a project are measured by the number of publications or quotations or by the recognition of peers, whereas for a small or medium-sized enterprise, the concept of ‘result’ is more likely to translate into the ability to put a product or service on the market.

The object of the above model is, in short, to enable existing programmes and schemes to work more efficiently in conjunction with new schemes, and to remedy the present unevenness in terms of access and participation.

Coherence and comprehensiveness of the European research and innovation system, covering every sphere from universities to the market while making for the more effective involvement of citizens and those who have traditionally remained outside the process, transparency, and defining clear rules: those are the words that could sum up the proposals contained in this report.