

# EARMA position paper on EC Green Paper: 'Towards a Common Strategic Framework for EU Research and Innovation funding'.

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## Preview

This paper sets out the position of the European Association of Research Managers and Administrators (EARMA) regarding issues raised in the Green Paper of the European Commission, 'Towards a Common Strategic Framework for EU Research and Innovation funding' (CSFRI) from February 9th 2011. EARMA welcomes the public consultation initiated by the European Commission with this Green Paper and contributes its views from the practitioners' side to influence the direction of the CSFRI towards user friendliness.

EARMA represents the community of research managers and administrators within Europe – currently more than 350 institutions from 29 different countries. Its members are building the European Research Area (ERA) by managing European research programs at the level of individual universities and research institutions. Since EARMA members are actively involved in the smooth management of these programs, the development and implementation of the CSFRI is of immediate and continuous importance to the association.

## Program Structure

### (1) Continuity and streamlining to enhance Framework attractiveness

As recent evaluations showed, FP7 is a big success in terms of scientific excellence and key structural aspects. In particular, three outcomes were all praised in the reviews:

- The prominent role of the ERC in raising excellence in European research
- The role of the Marie Curie program in training excellent young researchers for academic and business careers
- Collaborative Research Projects fostering enhanced European and international networking and collaboration of leading experts across scientific fields

EARMA advises to focus the '**Common Strategic Framework for Research and Innovation Funding**' (CSFRI) on these present strengths of FP7 and - wherever possible - on continuity of the successful instruments and programs and their names. This strategy will not only ensure continued efficiency of the programs, but also enhance 'brand recognition' and simplify life for potential applicants and users.

Excellence must remain at the heart of the Program, and competition for excellence should govern all funding decisions. Where and if new instruments are considered necessary, steps should be taken to ensure that they are well integrated with other instruments to avoid duplication and maximize synergy between different schemes. Simplification and streamlining of instruments should be the underlying aim.

For this reason the function of each instrument should be defined in a straightforward manner and where possible, there should be a single instrument with a broad function, rather than several instruments with similar functions.

Working towards a streamlined set of tools, the governance and the various rules and procedures for different European research funding programs were best harmonized simultaneously.

This should not only be the case for Joint Technology Initiatives (JTI), Article 169 and Private Public Partnerships (PPP) but also for the Joint Programming Initiatives (JPI), Structural funds and the Competitiveness and Innovation Program (CIP).

## **(2) Extended use of successful and simple bottom-up schemes to stimulate innovation and SME participation**

Today's frontier research leads to tomorrow's innovation. But the route is not direct and the timeframe varies between different fields of research. To maintain a world-class knowledge base for innovation, funding will be required at all levels from basic research to the development of marketable products.

Some best practice examples for instruments fostering highly innovative frontier research projects in a bottom-up approach include the successful FET program in the ICT area of FP7 and the successful CIP schemes.

EARMA recommends that these best practices be used to guide the design of a standalone bottom-up instrument to support 'Proof of Concept' studies throughout the CSFRI. Such an instrument should have a clearly defined purpose in the innovation cycle, as well as transparent connections with other funding schemes in the cycle. As suggested already in the Green Paper, such open, light, and fast implementation schemes would preferentially enable SMEs to pick up on new opportunities and bring them to the market.

### **Program Content**

#### **(3) Better integration of Social Sciences and the Humanities (SSH) in the research agenda**

The societal challenges currently defined by the EU tend to favour the physical and life sciences - the concept as such is not yet widely understood. Researchers will require support to cast their research in terms of societal challenges, whilst fully embracing the Social Sciences and Humanities (SSH) as an integral part of a trans-disciplinary approach, not just an additional extra.

It is currently unclear as to how new societal challenges could emerge to become a part of the funding landscape. Nevertheless, in order to address societal challenges it will be necessary to target not only a 'technology push' but also user demand, and SSH can play a strong role in the assessment of needs at both the human and societal level.

As well as contributing to societal challenges, it should be recognized that too narrow a definition of 'innovation' would unnecessarily exclude much creative research that can support the goals of the innovation. For example, humanities have a strong link to 'creative industries' and can support other areas that will help spur innovation. In addition, care must be taken not to allow companies with vested interests to influence policy makers to define grand challenges. EARMA recommends that SSH be represented both as an integrated and a separate part of the CSFRI. It will be very important to provide indicators and measures of social impact agreed across the EU scientific community – for the moment this is a rather hazy and controversial area.



#### **(4) Increase support for the ERC as a driver of innovation through frontier research**

The ERC has been very successful and gained considerable prestige within a very short lifetime and has already set standards in the ERA. It is essential that this program continues and is strengthened. The high level of trust in the selection process instigated by the ERC agency is demonstrated for example by the use of national or institutional funding to top up ERC grants or support excellent peer-reviewed ERC projects that have been rejected for budgetary reasons only.



EARMA advocates increasing the support for the ERC. It welcomes the recently opened and planned new funding lines (Proof of Concept and ERC+ grants) as interesting developments towards supporting innovation and, potentially, supporting mid-career researchers. However, the new grants have been introduced at the expense of the established and successful Starting and Advanced Grants. Therefore, a substantial increase in budget is essential to maintain a reasonable success rate for excellent applications.

#### **(5) Strengthen Marie Curie ITNs to train the next generation of inter-sectoral scientists**

The Marie Curie Actions are highly successful and a major contributor to mobility and multidisciplinary and inter-sectoral training of young researchers. Within FP7, the Initial Training Networks (ITN) were redesigned to foster a stronger collaboration of academia and industry, and in particular to broaden career perspectives of junior researchers both in the public and private sectors.

21<sup>st</sup> century science will become more and more interdisciplinary and inter-sectoral, with different players involved. ITNs are thus optimally suited to train the next generation of scientists with all the skills required to promote innovation. A huge oversubscription demonstrates the high acceptance of the scheme in the community, though the extremely low current success rate of ITNs (7 to 8 per cent) makes this program something of a lottery. In comparison, the individual fellowship schemes have a reasonable success rate of around 15 to 17 per cent.

EARMA recommends that the established Marie Curie Actions be retained as independent Specific Program in the CSFRI and that:

- (i) more money be funneled into this program to increase ITN success rate, while
- (ii) a two-stage evaluation procedure be introduced to ensure that chances of success are proportionate to the work put into the preparation of the projects

#### **(6) Improve access to infrastructures**

ESFRI proposals were supposed to coordinate national efforts and establish road maps to create trans-national infrastructures. Dozens of consortia analyzed the demands and developed such roadmaps for their field. However, we have often observed that many Member States dropped out before the implementation stage - at the moment of funding - leaving, at best, a truncated core group

EARMA suggests that with the trans-national infrastructures out of reach for the moment, a strengthened program supporting access for users of existing high-end facilities will be essential for state-of-the-art research. To this end, the I3 instrument should be retained.

Overall, a strong focus should be placed on new Member States and Eastern European countries to allow them to keep the pace with the other European players. However, capacity building measures should not have a call on CSFRI funds, but should be supported through structural funds.

## **Funding (Simplification)**

### **(7) Trust researchers and their national accounting and auditing procedures**

Beneficiaries involved in FP7 projects are generally subject to national regulations and auditing procedures which are acceptable for and approved by national funding bodies.

EARMA therefore supports a strategy of trusting researchers and their national accounting and auditing standards as well as a delegation of control from the EC to the national level. The utilisation of real 'usual' accounting practice by beneficiaries, and the introduction of stringent EC internal benchmarking mechanisms ensuring a uniform interpretation of rules, would simplify EC project administration significantly.

### **(8) Industry-oriented programs and schemes await evaluation of their impact**

During FP7, various new programs and schemes with industry-driven agendas were initiated. ETPs, JTI, PPPs, EIT and KICs introduced additional levels of complexity into European funding of research and innovation. Experience so far points to limited acceptance of and low commitment to these new approaches in the scientific community.

EARMA suggests that the effectiveness and success of these approaches in increasing industry participation and realizing innovation potential is evaluated, before planning new approaches. The introduction of any further new instruments and structures in CSFRI should be based on the lessons learned from the evaluation of the new industry-driven schemes above. Careful consideration needs to be given to which areas should be funded through Joint Programming, and which through more 'traditional forms' of collaborative research. Care also needs to be taken to ensure that there are good synergies between these very different funding mechanisms.

### **(9) Open, light and fast implementation schemes to increase attractiveness of the program (not only) for SME**

The current FP with its various levels of complexity with regard to programs, schemes and platforms complicates participation in the FP at various levels, from the identification of calls and topics of interest for any potential applicant to the administrative implementation of a project. It therefore favours those entities which are sufficiently large to invest in a support structure to deal with these issues – and discriminates against SMEs. Current strategies work against this discrimination by building up dedicated support structures for SMEs, but further increase bureaucracy.

EARMA recommends the following measures for raising the attractiveness of the FP to SMEs:

- (i) Open calls and more room for bottom-up actions
- (ii) Small and adjustable project sizes
- (iii) Support for stage 2 proposal preparation, modelled after the earlier 'Exploratory Grants' in the Craft program
- (iv) Use of the usual accounting practice
- (v) Drastically reduced time to implementation. The administrative routines in the Marie Curie and ERC Executive Agencies may become a role model for a standardized and fast implementation of other programs.

## (10) Co-funding approaches may diminish scientific excellence

New instruments increasingly rely on co-funding by national or other resources already in FP7. This trend is planned to continue, along with a strengthened approach towards programming initiatives on the expense of individual peer-reviewed projects. The requirement for national leverage funding seems to function well in some countries, and examples suggest that the interest in participating in EU projects rises when the funding gap between received EU fund and total costs is reduced.

However, not all countries can come up with such additional funding and the co-funding will most likely depend on the current economic situation rather than scientific excellence.

EARMA is against a progression along the co-funding strategy, since it may have two adverse effects in the competition for projects:

- (i) A bias away from excellence in research and innovation
- (ii) A bias towards laboratories in wealthier countries

## Policy

True innovation generally arises from creative minds in creative chaos. Ground-breaking innovations are often based on curiosity driven research and / or accidental observations, which only (much) later are converted into a marketable product.

Examples include the Nobel prize-winning development of the 'polymerase chain reaction' (PCR) transformed from a specialist tool in molecular biology to THE diagnostic tool in molecular medicine. There is also the university social virtual network Facebook that expanded into a worldwide net, leading also to the revolutions occurring recently in North Africa and the Middle East. While such innovative activities and their results cannot be planned or predicted per se, the creation of a favourable environment will stimulate creative activities.

## (11) Entrepreneurial training in higher education and university

As pointed out in the 'Innovation Union' communication, a closer link between research and innovation is required to make Europe more successful in the transformation of knowledge into innovative products.

A second factor to be developed alongside is entrepreneurship – both in the scientific community and in the public at large. Academics need to better understand commercial issues. Therefore, organising more exchanges between industry and academia will help to overcome the cultural differences existing between the scientific communities and companies, to further the mutual understanding of each others' requirements.

The Marie Curie ITN scheme in FP7 has opened a way to train the next generation of scientists in understanding both the academic and business cultures. It can act as a model for universities to develop similar activities.



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