

# SwissCore Synopsis Research

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## FP7 Special edition

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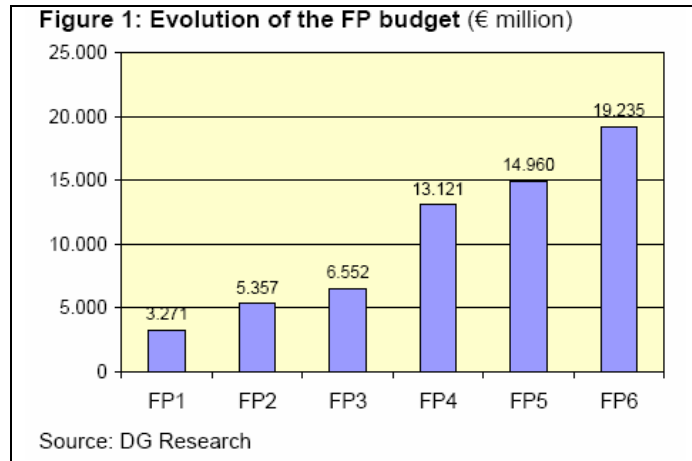
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## ◆ What FP7 will the EU's Financial Perspectives allow for?

Since 1984, the Framework Programmes have been evolving in terms of their aims, content and budgets (see below). However, the doubling of the EU budget allocated to research requested by the European Commission in its FP7 proposal is both a radical proposal and an unlikely achievement.



Given the very political nature of the decision it would make little sense to study in detail all the possible outcomes of the European Council of 16-17<sup>th</sup> June, where the Luxemburg Presidency aims at finding a compromise on the Financial Perspectives of the EU for 2007-2013. However, it is worth reminding ourselves that a doubling of the EU budget as proposed by the Commission would require either:

- lowering the agricultural and/or cohesion budgets of the EU. This is very unlikely given the enlargement of the EU and the fact that France, following the results of the referendum on the Constitution, can hardly afford to be perceived by its public opinion as weak in Brussels. Or
- increasing the overall budget of the EU. This scenario would require Germany to contribute more to the EU budget and/or the UK to agree on a revision/reduction of the “rebate” it had obtained in the early ‘80s on its contribution to the EU budget. Both will be difficult to achieve (especially given the -possibly- upcoming elections in Germany).

Although Luxemburg is doing its best to achieve a compromise at the Summit on 16-17 June, it is unlikely that any solution with an increase of more than 30-50% compared to FP6 will be achieved. This lower budget would have immediate consequences on the potential content of FP7 and might even mean that the Commission would have to redraft its FP7 proposal. This uncertainty is taken into account in the analysis below, especially with regard to the possible creation of the European Research Council (ERC).

Should no compromise be possible between the Heads of State and Government in June 2005, the issue would have to be postponed by at least 6 months (probably even more, given that the UK which will take over the EU Presidency for the second half of 2005 has own goals to defend in this discussion and might not want to tackle this topic under its own chairmanship). Such delays would also have drastic consequences for FP7, both in terms of preparations and implementation and would be especially difficult to manage for Associated Countries, which have own decision processes to go through...

◆ **The proposed structure of FP7**

<b>Proposed FP7 structure</b>		
	<b>Themes</b>	<b>Million €</b>
<b>I) COOPERATION</b>	Health	<b>8'317</b>
	Food, Agriculture and Biotechnology	<b>2'455</b>
	Information and Communication Technologies	<b>12'670</b>
	Nanosciences, Nanotechnologies, Materials and new Production Technologies	<b>4'832</b>
	Energy	<b>2'931</b>
	Environment (including Climate Change)	<b>2'535</b>
	Transport (including Aeronautics)	<b>5'940</b>
	Socio-economic Sciences and the Humanities	<b>792</b>
	Security and Space	<b>3'960</b>
<b>Total COOPERATION</b>		<b>44'432</b>
<b>II) IDEAS</b>	European Research Council	<b>11'862</b>
<b>III) PEOPLE</b>	Marie Curie Actions	<b>7'129</b>
<b>IV) CAPACITIES</b>	Research Infrastructures	<b>3'961</b>
	Research for the benefit of SMEs	<b>1'901</b>
	Regions of Knowledge	<b>158</b>
	Research Potential	<b>554</b>
	Science in Society	<b>554</b>
	Activities of International Co-operation	<b>358</b>
<b>TOTAL CAPACITIES</b>		<b>7'486</b>
<b>Non-nuclear actions of the Joint Research Centre</b>		<b>1817</b>
<b>TOTAL EC</b>		<b>72'726</b>
<b>EURATOM for nuclear research and training activities</b>		<b>3'092</b>

◆ **FP7: what's new?**

Overall, FP7 is really about continuation. However, the Commission has proposed some bold additions to FP7 compared to FP6. In order to prepare the political field for the debates that will necessarily emerge, the Commission had already announced from early 2004 that it intended to a) fund basic research at European level and 2) ask Member States for a doubling of its research budget. However well prepared, these two innovations remain quite radical and their realisation will be dependant on the EU's future budgetary situation.

This is a summary of the main evolutions proposed by the European Commission for FP7, an evaluation of their realisation potential and the main issues still to be discussed:

a) Support for basic research

To fund basic research at European level, the European Commission proposes to set up a European Research Council. The exact status and set-up of this new body is still unclear (see article below). However, it is certain that the fate of this new initiative, which is supported by most but not all Member States, will heavily depend on the budget allocated to research in the Financial Perspectives 2007-2013. Although the Commission still refuses to mention what the minimum level of funding for such an initiative would be, it is clear that there will be a minimum threshold to be reached in order for the activities of the ERC to make up a critical mass.

b) Doubling of the budget

In its Communication on “S&T, the key to Europe’s future”, the Commission had announced that it would try to obtain a doubling of its research budget for the years 2007-2013. Indeed, the yearly budget proposed by the Commission for FP7 is around 10 billion € (that of FP6 is currently around 5 billion €). FP6 itself represented an increase of around 15% compared to FP5 (see article above). Given that such an increase of the research budget of the EU would require an overall increase of the EU budget (unless Member States agree upon cutting the EU’s agricultural and regional spendings), a unanimous decision of the Heads of Member States on this topic is required.

c) Support for security research

Long awaited and announced by the Commission is the inclusion of a research priority covering security-related topics. The aim will be to tackle the fragmentation, lack of critical mass and of interoperability at EU level and to focus EU security research on issues of clear added value such as: a) protection against terrorism and organised crime, b) security of infrastructures and utilities, c) border security and d) restoring security in case of crisis and diverse emergency management operations.

To prepare the inclusion into FP7 of this new theme, the Commission had launched in 2004 a Preparatory Action for Security Research (PASR) which found a large response from the research community (see <http://www.cordis.lu/security/policy.htm> for further information).

After a first period of doubt about the exact place this theme would occupy in FP7, it has now been included into the “Collaborative research” part and merged with the “Space” research theme.

d) Duration of 7 years (instead of 4)

The Commission has proposed to harmonise the length of the Framework Programme and of the Financial Perspectives and thus prolong the duration of FP7 to 7 years (2007-2013). This will also allow for longer term perspectives in European research programmes and projects and seems to be a welcome development for all parties.

e) Simplification and user-friendliness

The Commission places a major emphasis on this issue. See article below.

f) Instruments to support research

There again, FP7 stands for continuity. Some additions and overall simplification should help address the criticisms that the New Instruments faced in FP6.

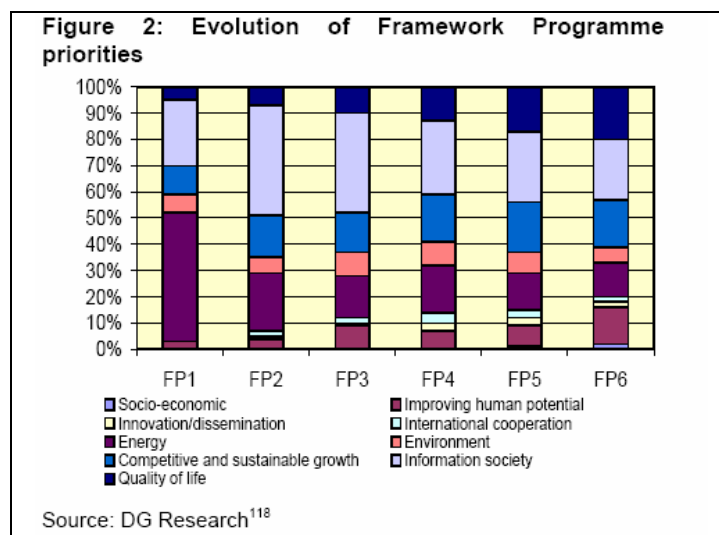
- 1) STREPs and IPs should be merged into a single instrument: Collaborative projects. The goal of this instrument will be to develop “new knowledge, new technology, products or common resources for research”. Their size and internal organisation will vary according to the field. This should contribute to more clarity between the funding instruments. Networks of

Excellence (NoEs), will undergo limited changes in order to make them more user-friendly. Coordination Actions (CA) and Specific Support Actions (SSA) should remain unchanged.

- 2) Joint Technology Initiatives (JTI) will be introduced to provide platforms for public-private partnerships at European level in order to help implement the goals set by the Technology Platforms' Strategic Research Agendas. It is foreseen that only a limited number (probably around 5) will be implemented under FP7 (see article below).
  - 3) ERA-NET PLUS. ERA-NET, an instrument to help coordinate national research programmes in order to create more synergies between the national research landscapes, was one of the new activities introduced by FP6. ERA-NET PLUS should reinforce the coordination of national research programmes by providing financial incentives for the launch of joint research calls within ERA-NET consortia. Provided a number of conditions are satisfied, the Commission is considering offering a "top-up" of around 15-20% of total costs for joint calls where participating entities create a common fund for the purpose of the action. (see article below and the background document on the coordination of national research programmes in the "links" section).
  - 4) Phasing out of Marie Curie Individual fellowships replaced by the co-funding of national individual fellowship schemes. The Commission would like to replace its current "Marie Curie Individual Fellowship Scheme", which is very demanding in terms of management resources, by distributing its resources for individual fellowships to comparable national schemes which would comply with a certain number of rules and standards. This proposal is met with scepticism by most countries and will probably be downsized or not see the face of light.
- g) Innovation aspects of FP moving to new Competitiveness and Innovation Programme (CIP)  
FP7 and the CIP should be complementary and thus the Framework Programme will not deal with "downstream" innovation issues. These, like the business and innovation support services (Innovation Relay Centres) or the networking and innovation promotion activities will move to the CIP. This programme will run in parallel to FP7 and has been proposed with a total budget of 4.2 billion €.
- h) Externalisation of certain project management tasks  
In order to manage the Framework Programme more effectively and to concentrate on its scientific and political aspects, the Commission proposes to externalise to an Executive Agency the administrative work linked to the Framework Programme (preparing contracts, handling administrative and financial reports, etc). This issue is dealt with in more depth in a later article.
- i) Regions of Knowledge" and "Research Potential"  
These two new research fields should respectively help create clusters of research activities in regions and help develop the research potential of Europe's convergence and outermost regions. These "region-oriented" measures should compensate for the increasingly "excellence-driven" approach to research activities at European level.

### **Winners and losers in FP7**

The budgets of the Framework Programmes have considerably increased since 1984. Their content and priorities have also evolved with time as the table below shows:



How about FP7? Which priorities and themes are gaining and which are losing momentum, as far as the Commission's proposal is concerned?

<b>FP7 (selection)</b>		<b>% compared to FP6<sup>1</sup></b>
<b>I) COOPERATION</b>	Health	+ 90%
	Food, Agriculture and Biotechnology	+ 80%
	Information and Communication Technologies (ICT)	+ 70%
	Nanosciences, Nanotechnologies, Materials and new Production Technologies	+ 90%
	Energy	+ 80%
	Environment (including Climate Change)	+ 40%
	Transport (including Aeronautics)	+ 80%
	Socio-economic Sciences and the Humanities	+ 5%
	Security and Space	n.a.
<b>II) IDEAS</b>	European Research Council (ERC)	n.a.
<b>III) PEOPLE</b>	Marie Curie Actions	+ 105%
<b>IV) CAPACITIES</b>	Research Infrastructures	+ 205%
	Research for the benefit of SMEs	+ 120%
	Regions of Knowledge	n.a.
	Research Potential	n.a.
	Science in Society	+ 250%
	Activities of International Co-operation	- 45%

In spite of the numerous budgetary changes ahead as well as the necessity to incorporate into the table large budgets that cannot be compared to FP6 (like Security research and European

<sup>1</sup> Yearly budget calculated linearly over 7 years (i.e. not taking progressive phasing-in into account)

Research Council), this table gives an interesting insight into the priorities set by the Commission for FP7. In the hypothesis of the doubling of the budget devoted to research (i.e. +100%), it shows a series of clear patterns:

The “winners”:

- Life Sciences;
- ICT;
- Nanosciences; Material Sciences & Production Technologies;
- Energy & Transport;
- Marie Curie;
- Infrastructures;
- Research for SMEs;
- Science and Society.

The “losers”:

- Environment;
- Socio-economic Sciences and Humanities;
- International Cooperation.

The “newcomers”:

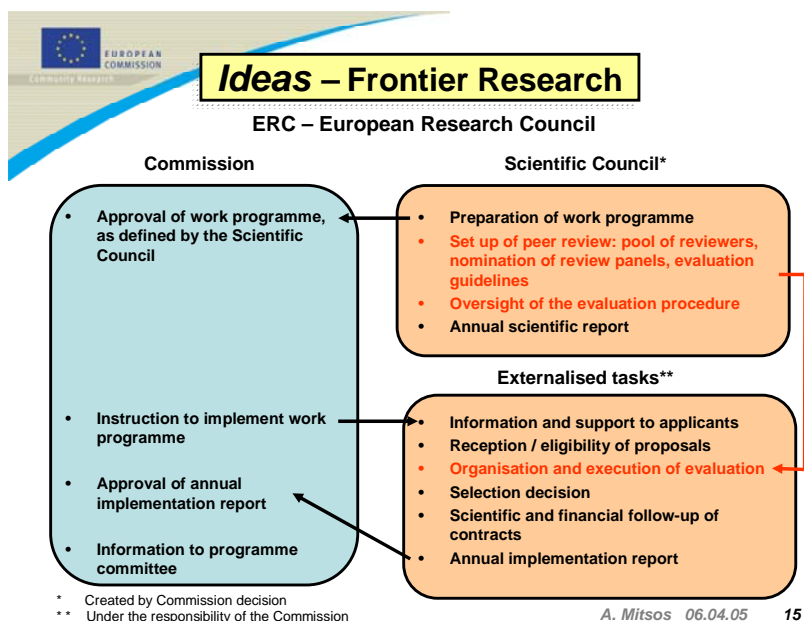
- Security research: formerly controversial, this theme seems to have gained acceptance via its integration into the Cooperation part of FP7.
- European Research Council: with around 1/6<sup>th</sup> of FP7’s budget, its potential and realisation will heavily depend on the fate of the programme’s budget. However, the ERC has been well prepared and anchored politically in the last months and will be less controversial with regard to its form and content than to the budget required to run it in a credible fashion.
- Regions of Knowledge and Research Potential.

These are the signals the Commission is currently sending out. Both the legislative process and the outcome of the discussions on the EU’s financial perspectives will bring many changes into the final outcome.

### ◆ **ERC: To fund or not to fund basic research at EU level**

Few issues have raised so many comments and concerns in European research policy as the (possible) creation of a European Research Council (ERC). Since the beginning of the debate (formalised by a Commission Communication early 2004), the main issues have remained more or less the same: autonomy and independence of the ERC. Whereas now everyone agrees that these are relevant concepts for an ERC, the concrete implementation of these concepts is sometimes still not clear. “Autonomy” is a wide concept and difficult to pin down or measure in a quantitative way. It means different things throughout Europe and it will have to be spelt out in more details. “Independence”, on the other hand, is generally assumed to mean that science- or excellence-driven decisions cannot be changed by policy-related issues. In other words, as soon as the evaluation panels have established the ranking list of the proposals, it is a purely administrative task to calculate how far the money goes to fund the ranked proposals. No one, neither the Commission nor the Scientific Council, will then change the ranking of those proposals.

Together with the Commission proposal of FP7, Director General A. Mitsos proposed to implement the ERC on 6 April 2005 in the following way:



Since graphical images are such powerful tools (and some of the elements in this diagram raised strong concerns), it is worth having a look at it in more detail. The following comments are inspired both by personal discussions with Commission representatives as well as input for the first drafts of the FP7 Specific Programmes.

- The Scientific Council (SC) will draft a Work Programme, which will then be formally adopted by the European Commission. If the Commission thinks that changes are necessary, it will explain the reasons and suggest amendments. Most likely, these will have to be accepted by the SC.
- The SC will also set up all the rules and guidelines necessary for the smooth functioning of the ERC. This includes the elements listed in the graphic, i.e. setting up of peer review, nomination of reviewers and review panels, establishing evaluation guidelines. The SC will also oversee the evaluation procedure. However, it will not, itself, evaluate the individual proposals submitted to the ERC. This will be done, as indicated, by the evaluators nominated by the SC.
- The concrete organisation and implementation of the peer review will be managed by an Executive Agency (EA) which will be established under the responsibility of the Commission. This should guarantee independence of the ERC as a whole. Whereas, for some people in the scientific community, any role in this process of the Commission bears the risk of “Brussels influence”, the Commission wants to safeguard the ERC against inappropriate lobbying attempts from Member States. If the EA reports to the Commission (and not to Member States, for instance), then the risk of influence of Member States can be excluded, i.e. also attempts to try to channel money into regional developments or to get as much money back nationally as possible.
- The evaluators will rank the proposal in a hierarchical list, with the best proposal at the top. Since the only criterion should be scientific excellence, it shall not be changed after the peer review have set it up and agreed on it. Therefore, the actual decision of which project will be funded from that list will be a purely administrative or arithmetical one. The projects will be funded from the top of the list until there is no more money left. In other words, this decision can be made by the EA and does not need to go back to the SC.
- Based on input from the EA, the SC will write a scientific report and hand it in with the Commission. The EA, on the other hand, will report to the Commission on the implementation of the scheme, i.e. finances, administration, management, etc.
- The Commission foresees a Programme Committee with national representatives. Their role will have to be elaborated in more detail. Current Commission thinking is that they “assist” the Commission in the implementation of this Specific Programme “Ideas”.

There are still many elements which will have to prove how they work in the practical day-to-day work of the ERC. Still, the signals which can be perceived from the Commission are positive, sticking to the original idea of an independent and autonomous funding instrument for basic research, based on excellence alone and not touched by other policy objectives.

The much bigger threat for the future of the ERC lies somewhere else, namely in the discussion about the Financial Perspectives 2007-2013 for the EU. If the budget of FP7 does not reach the doubling or at least substantial increase the Commission has suggested – then one of the first instruments to fall will most certainly be the ERC.

### ◆ **Will FP7 really stand for simplification?**

The fact that the Framework Programmes are criticised for the administrative burden they represent is not new. However, the issue of the necessary simplification of FP7 compared to its predecessors has recently become a *Leitmotiv* of the European Commission. There are many different reasons for that:

- the fact that that FPs are really far from simple in terms of administrative and funding procedures in spite of many promises already made by the Commission in this direction during the preparation and launch of FP6;
- the fact that under FP6 more discussions on simplification have been triggered by the introduction and evaluation of the so-called New Instruments;
- as well as the fact that if FP7 wants to mark a breakthrough in terms of research at European level, it should not only be by introducing new fields (basic research) or drastically increasing its budget but also by improving how it funds research.

The Marimon report on the evaluation of the New Instruments as well as the 5-Year Assessment Reports of the Framework Programme (both the general analysis and that concentrating on the IST programme) emphasised the need to cut the “red-tape” and streamline the administration of the Framework Programmes.

In its reply to the Marimon report in the summer 2004, the Commission had announced that measures towards better administration of the Framework Programmes would be taken without delay. It set up an internal task force to determine which measures could be still tackled under FP6 and published an Action Plan on Rationalisation and Acceleration.

For FP7, the Commission proposes to simplify the administration and financial along the three principles: flexibility, rationalisation and coherence/consistency. These should be applied in all aspects of the Framework Programme: procedures, communication, documents, administration, rules, etc.

Along with its proposal on FP7, the Commission presented a Working Document “Simplification in FP7” and proposed the following 10 measures:

1. Continuity and simplification in the use of the research instruments (e.g. clarifying the goals of specific types of research projects to make more transparent when and for what they should be used);
2. Consistent and high-quality communication (both in the information documents published and the interpretation of the rules by the different services of the Commission);
3. Rationalisation of the information requested from participants through the establishment of an electronic registration desk (to avoid multiple requests of the same documents) and the generalisation of 2-stage proposal submission procedures;

4. Reduction of a-priori financial controls (e.g. publication of a list of criteria for the definition of the financial liability of firms);
5. Reduction of micro-management controls by the Commission and more support to the autonomy of consortia through training sessions and availability of helpdesks on project management issues;
6. Shortened project-selection processes (e.g. by removing the need for approval of project lists by the Programme Committees);
7. Increased synergies with other sources of research funds such as the European Structural Funds;
8. Simplified financial Community contributions through the use of more lump-sum financing;
9. No more need for complex cost reporting models and clarifying definition of eligible costs;
10. Simplified support rates per type of activity (research and technological development, demonstration, training, dissemination and use transfer of knowledge, management, etc.).

In the perspective of the preparation of FP7 -especially in view of the preparation of its Rules for Participation- the Commission has set up a Commission Inter-service (i.e. between the different DGs dealing with research policy) Working Group to reduce discrepancies between the different DGs implementing the FPs and bring forward proposals for concrete improvements. It also established a Sounding Board of smaller actors which has the aim of removing, as far as possible, the barriers faced by smaller research players such as SMEs or small research centres and universities). Consultations with other actors such as the European Court of Auditors and the European Parliament are also underway in order to allow for a general framework towards simpler financing rules.

The proposals outlined above are still vague and will have to be precised in the Rules of Participation of FP7 which are currently being finalised and should be presented by the European Commission at the end of the summer.

For the moment, it seems that the Commission has heard the message of the research Community asking for simplification and more continuity in its research programmes. Whether these good intentions will survive the decision-making process and the administrative requirements of the European Commission, to which DG Research is also submitted remains to be answered.

Commission Working Document:

[ftp://ftp.cordis.lu/pub/documents\\_r5/natdir000001/s\\_6838005\\_20050426\\_132504\\_ADS0011909en.pdf](ftp://ftp.cordis.lu/pub/documents_r5/natdir000001/s_6838005_20050426_132504_ADS0011909en.pdf)

### **Introducing Executive Agencies to streamline administration in FP7**

In order to streamline and accelerate administrative processes and thus contribute to the general simplification goals of FP7, the Commission would like to externalise certain tasks linked to the management of the Framework Programmes. Given that the Commission is not allowed to externalise any funding activities, it would seize this opportunity to, at least, diminish the administrative tasks faced by its staff in order to concentrate on more strategic activities (such as the scientific management of projects or policy formulation) and increase the productivity of its staff.

Overall, the Commission foresees the possibility to create an Executive Agency to deal with the tasks associated with the logistics of proposal reception and evaluation -including inviting and paying expert evaluators-, financial viability checking and the provision of statistics. For Marie Curie as well as SME-specific actions, the Commission also considers entrusting it with the contract negotiation and follow-up in order to avoid micro-management by the Commission. As far as the ERC is concerned, the Commission feels that an Executive Agency would be a "suitable structure to

support the implementation of ERC projects whilst providing the necessary degree of independence”.

The Commission only has a limited experience with Executive Agencies given that the possibility only exists since 2003 and that only three have been founded so far (one of them dealing with the education programmes). The statute of such agencies was laid down in a Council Regulation (No 58/2003) which defines the following characteristics:

- The Commission must decide when adopting a programme whether it wants to create an Executive Agency to implement it. This should be preceded by a cost-benefit analysis.
- The Executive Agency can only be located at a place where the European Commission is also located, which prevents bargaining between Heads of States and Government.
- The Director shall be appointed by the European Commission.

Council Regulation No 58/2003 of 19 December 2002 laying down the statute for Executive Agencies to be entrusted with certain tasks in the management of Community programmes:  
[http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l\\_0111/l\\_01120030116en00010008.pdf](http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_0111/l_01120030116en00010008.pdf)

### ◆ **Technology Platforms and Joint Technology Initiatives in FP7**

The industry participation under FP6 have been a source of disappointment for the European Commission. The Technology Platforms and the Joint Technology Initiatives should contribute to changing this for the better under FP7.

The Technology Platforms (TP) are exchange fora set up with the support of the European Commission in order to get together -under the leadership of industry- stakeholders from specific fields with the aim of defining a strategic research agenda for their domain. Their goal is to contribute to more European competitiveness and growth and the Commission is “convinced of the great potential benefits from the activities of the Technology Platforms and, in particular, of the appropriateness of defining industrial research needs in this consensual and bottom-up manner”.

During the last 1 ½ years, around 25 Technology Platforms have been set up. The degree of advancement of their work varies but three main stages can be differentiated during the lifetime of a TP:

- 1) Stakeholders get together to discuss and establish their vision for the future.
- 2) They define a Strategic Research Agenda (SRA) setting out their views on the necessary medium to long term research, development and demonstration needs for their specific field or technology.
- 3) The Strategic Research Agenda is then implemented through many different means: private R&D, national or regional programmes, the European Framework Programme as well as other European sources.

In terms of the Framework Programme and FP7 in particular, the Strategic Research Agendas should be implemented through collaborative research projects in the nine thematic priorities -the SRAs will thus be taken into account in the definition of the FP7 Specific Programmes and workprogrammes- and through Joint Technology Initiatives.

The Joint Technology Initiatives (JTI) will be private-public partnership structures to be set up in order to implement the Strategic Research Agendas of a limited number of fields (around 5 JTIs are currently foreseen). The JTIs will most probably be set up using the article 171 of the EC Treaty which allows the Commission to set up joint undertakings (cf. Galileo) in order to complement its work in the research programmes. Possible topics for such JTIs will most probably be defined in the next months so that the legislative process lead to their establishment (although the procedure

differs, for Joint Undertakings as for Article 169, this has to be done in parallel to the legislative leading Framework Programme). Rumours about possible topics for JTIs currently list the following: innovative medicine, nano-electronics, embedded systems, aeronautics, hydrogen and fuel cells as well as GMES.

The detailed status report on the development of Technology Platforms (February 2005) can be found below:

[ftp://ftp.cordis.lu/pub/technology-platforms/docs/tps\\_status\\_report\\_final\\_090305.pdf](ftp://ftp.cordis.lu/pub/technology-platforms/docs/tps_status_report_final_090305.pdf)

### ◆ Coordination of national research programmes in FP7

Article 169 and ERA-NET projects were introduced in FP6 in order to contribute to its “structuring” effect. Their goals differ slightly:

1. ERA-NET aims at the networking and coordination of research programmes carried out at national or regional level.
2. Article 169 -the more powerful but also more cumbersome to implement of the two- allows for the participation of the Community in jointly implemented national research programmes.

EDCTP, the European and Developing Countries Clinical Trials Partnership initiative, was the first - and only- implementation of the Article 169 launched under FP6. The Commission presented its proposal for EDCTP in 2002 and it was launched -after a co-decision procedure by the Parliament and Council of Ministers- in June 2003.

Because launching an Article 169 initiative requires complex and relatively heavy procedures, the Commission is already considering how best to proceed under FP7 and which topics could potentially become the next initiatives.

Based on the EDCTP experience, potential Article 169 initiatives should be carefully considered in view of the following criteria: political relevance and visibility of the topic, community relevance (European added-value), scientific relevance, relevance in view of the Framework programme, instrument relevance (why article 169 and not another FP7 instrument like ERA-NET), critical mass in terms of interested Member States as well as pre-existing partnerships and cooperation.

The EDCTP experience has also shown that a number of issues should be improved in order to facilitate the implementation of future Article 169.

- a) In order to achieve efficient financial integration of national research programmes, a number of administrative and legal barriers should be tackled.
- b) In order to avoid lengthy co-decision procedures, Member States should commit both politically and financially to future Article 169 very early in the process.
- c) In order to be flexible and allow for other topics to emerge during the 7-year duration of FP7, some flexibility regarding future Article 169 initiatives should be built into the Specific Programmes.
- d) The participation of non-Member States (e.g. Associated States) should be possible given that some of the funding for Article 169 comes from FP7. This issue should be addressed in more depth in order to find the best structure for their involvement.

In the light of the criteria mentioned above, the Commission has established an unofficial short-list of topics where it feels that national programmes could be further integrated into possible Article 169 (all are ERA-NET actions currently underway) for FP7:

- Metrology;
- Embedded systems;
- Human bio-monitoring;
- Baltic sea research;
- Technologies for ambient assisted living;
- Programmes for research performing SMEs;
- Programmes promoting cooperations between SMEs and research organizations.

As for ERA-NET, over the first 2 years of FP6 (i.e. 4 deadlines), 90 projects for a total of 100 mio. € have been financed. The success rate of a little less than 50% shows what the Commission calls a “healthy oversubscription”. Although the last call under FP6 will only be closed this autumn (around 18 mio. € are still to be distributed), the Commission believes that the “enthusiastic response” received to this totally new initiative is the proof that the ERA-NET scheme came to “fill a real gap in the field of coordination of national and/or regional research and innovation programmes”. The Commission also found it very encouraging that “despite the novelty of the scheme, several ERA-NETs set from the very start quite ambitious objectives, going all the way to implementing joint calls and preparing the ground for integrating parts of, or whole programmes”.

In view of FP7, the Commission would like to address some of the perceived weaknesses of the scheme such as the low participation of the new Member States and of regional programmes as well as the low representation of certain strategic areas like energy and basic research. Some changes to the existing scheme could also include a review of some of the eligibility criteria in order to allow for the participation of public bodies which do not yet have fully fledged programmes but intend to develop some and the encouragement of existing ERA-NETs to make use of the possibility to deepen and/or broaden their scope in the course of their development, e.g. by taking new partners on board.

In order to further reinforce the scheme and encourage more projects to launch sizeable joint calls, the Commission would also like to introduce a further reaching version of the scheme: ERA-NET PLUS. As already mentioned, ERA-NET PLUS should reinforce the coordination of national research programmes by providing financial incentives for the launch of joint research calls within consortia. Provided a number of conditions are satisfied, the Commission is considering offering a “top-up” of around 15-20% of total costs for joint calls where participating entities create a common fund for the purpose of the action. ERA-NET PLUS would remain a flexible instrument but be more of a bridge towards future Article 169 projects.

As for the thematic openness of ERA-NET under FP7 (i.e. the FP6 ERA-NET scheme is bottom-up, functions separately from the thematic priorities of FP6 and is managed by a single dedicated unit at DG Research), the Commission foresees to link it up more closely the thematic priorities. Despite the fact that the Commission ensured in its FP7 proposal that “(ERA-NET) actions may cover subjects not directly linked to the nine themes in as far as they have a sufficient EU added value”, some fear that ERA-NETs may be managed by the thematic units of DG Research, which might lead to less homogeneity in the scheme.

The document below highlights the current status and lessons learnt by the Commission in the field of ERA-NET, Article 169 as well as in the Open Method of Coordination:

[ftp://ftp.cordis.lu/pub/coordination/docs/coordination\\_of\\_national\\_programmes\\_101104.pdf](ftp://ftp.cordis.lu/pub/coordination/docs/coordination_of_national_programmes_101104.pdf)

### **The reactions to FP7: who thinks what?**

The Commission has put together a very good web-site listing the contributions and reactions of all stakeholders on different aspects of the FP7 debate. This includes position papers by:

- different European institutions;
- Member States, Associated States and Candidate countries, as well as regional authorities;
- European and national research policy actors.

These papers can be found under <http://www.cordis.lu/fp7/debate.htm>

The results of the general consultation launched by the European Commission between July 2004 and October 2004 in view of the preparation of FP7 have also been compiled and made public. They can be found under:

[http://europa.eu.int/comm/research/future/index\\_en.cfm#consultation](http://europa.eu.int/comm/research/future/index_en.cfm#consultation)

### ◆ Infrastructures in FP7

The Commission's FP7 proposal foresees a budget of approx. 4 billion Euro for activities linked to research infrastructures. Two major strands of activities are planned: 1) Support to existing infrastructures (support to trans-national access, integrating activities and support to e-infrastructures) and 2) Support to new infrastructures (design studies as well as promote and support the construction of new and major updates to existing infrastructures).

In view of this second strand of activities, the European Strategy Forum on Research Infrastructures (ESFRI) published in March 2005 a "List of Opportunities" with concrete examples of new, large-scale Research Infrastructures which it believes the scientific community in Europe will need in the coming decade.

The list identifies 23 priority infrastructures projects which are felt to be mature enough to possibly get funding under FP7. These projects include medium and large-scale projects, (their costs range from less than €100 million to more than €1 billion per project) and cover a large range of scientific fields:

- "4 projects in physics and astronomy, corresponding to large-scale facilities for nuclear physics, astroparticle physics and astronomy;
- 1 project on nanotechnologies, distributed over several sites;
- 4 projects for multidisciplinary facilities for the analysis of matter (material and biological): three of these concern new generation sources for neutrons (spallation source) and photons (free electron lasers); the fourth is an upgrade of the European third generation synchrotron;
- 1 project in supercomputing for applications in various fields;
- 4 projects in environmental sciences, ranging from coastal research to biodiversity;
- 7 projects in biological and medical sciences, including some with a clear biomedical character;
- 2 projects in social sciences and humanities, based on the collection of data throughout Europe".

Set up in April 2002, ESFRI is composed of representatives of the Member States and States associated to the Framework Programme. Its role is to "support a coherent approach to policy-making on research infrastructures in Europe, and to act as an incubator for international negotiations about concrete initiatives". In particular, ESFRI is preparing a roadmap for new research infrastructures of pan-European interest for the next 10 to 20 years. As part of this process, ESFRI established three Steering Groups to provide advice in three specific fields: Physical Sciences and Engineering, Biological and Medical Sciences and Social Sciences and Humanities.

ESFRI list of opportunities and more information:

[ftp://ftp.cordis.lu/pub/era/docs/esfri\\_list\\_opportunities\\_290305.pdf](ftp://ftp.cordis.lu/pub/era/docs/esfri_list_opportunities_290305.pdf)

## ◆ **FP7 websites**

CORDIS FP7 website:

<http://www.cordis.lu/fp7/home.html>

EUROPA FP7 website (best access to all official documents):

[http://europa.eu.int/comm/research/future/index\\_en.cfm](http://europa.eu.int/comm/research/future/index_en.cfm)

## ◆ **FP7 Documents**

FP7 proposal (THE legal document)

[http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/com/2005/com2005\\_0119en01.pdf](http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/com/2005/com2005_0119en01.pdf)

FP7 Impact evaluation and ex-ante evaluation (Working document of the Commission with a very interesting Annex explaining the R&D context, evolutions and expectations around FP7)

[http://europa.eu.int/comm/research/future/pdf/comm\\_sec\\_2005\\_0430\\_1\\_en.pdf](http://europa.eu.int/comm/research/future/pdf/comm_sec_2005_0430_1_en.pdf)

Simplification in the 7th Framework Programme (Working Document)

[ftp://ftp.cordis.lu/pub/documents\\_r5/natdir0000001/s\\_6838005\\_20050426\\_132504\\_ADS0011909en.pdf](ftp://ftp.cordis.lu/pub/documents_r5/natdir0000001/s_6838005_20050426_132504_ADS0011909en.pdf)

Communication: Building the ERA of Knowledge for growth (background document explaining the context, content and rationale behind the FP7 proposal)

[http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/com/2005/com2005\\_0118en01.pdf](http://europa.eu.int/eur-lex/lex/LexUriServ/site/en/com/2005/com2005_0118en01.pdf)

## ◆ **Other relevant documents and links**

Views and contributions to the FP7 debate

<http://www.cordis.lu/fp7/debate.htm>

Commission background document on the coordination of national research programmes

[ftp://ftp.cordis.lu/pub/coordination/docs/coordination\\_of\\_national\\_programmes\\_101104.pdf](ftp://ftp.cordis.lu/pub/coordination/docs/coordination_of_national_programmes_101104.pdf)

Basic research at EU level

[http://europa.eu.int/comm/research/future/basic\\_research/index\\_en.html](http://europa.eu.int/comm/research/future/basic_research/index_en.html)

European Strategy Forum on Research Infrastructures (ESFRI) website

[http://www.cordis.lu/era/esfri\\_home.htm](http://www.cordis.lu/era/esfri_home.htm)

Technology Platforms website

<http://www.cordis.lu/technology-platforms/home.html>

ERA-NET website:

<http://www.cordis.lu/coordination/era-net.htm>

Security research website :

<http://www.cordis.lu/security/policy.htm>

Key Figures 2003-2004 Towards a European Research Area Science, Technology and Innovation (all the relevant R&D statistics, Switzerland included in some of the comparative data)

[http://europa.eu.int/comm/research/era/pdf/indicators/benchmarking2003\\_en.pdf](http://europa.eu.int/comm/research/era/pdf/indicators/benchmarking2003_en.pdf)

Indicators (statistics) about R&D in the EU:

<http://www.cordis.lu/indicators/>