"European Commission Research"

Proposal Selection

(an insider's view)

Introductory Comments

- **♦** A short presentation on how the EC Project Proposal Evaluation system works.
- The EC is a major funder of technical research within the EU.
- Increasingly national funds are distributed via the EC, recognising the importance of multinational research.
- Most funding goes to EU member country states.
- ◆ Specific Programmes to involve countries joining the Union and training courses etc.
- Special rules for countries applying to join.
- Special programmes to include non-EU "developing" countries

European Commission Research

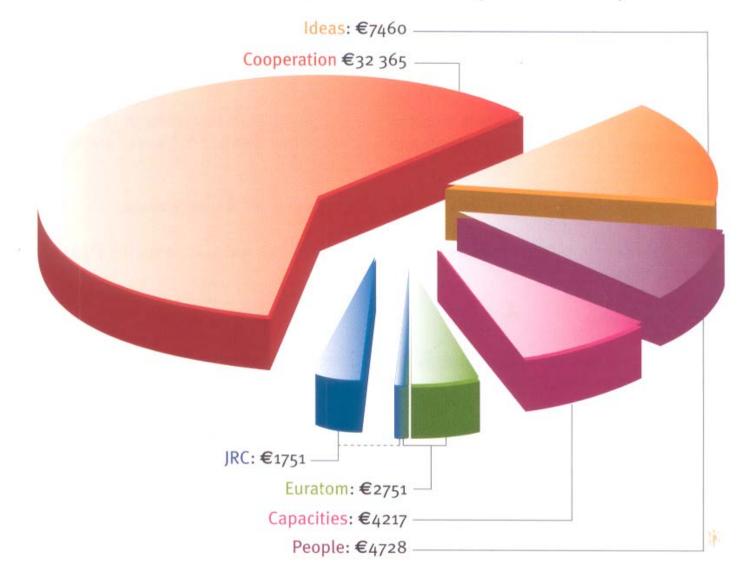
- Organised through Framework Programmes.
- Currently at start of seventh such programme: FP7.
- ◆FP7 to run from 2007-2013.
- ◆Budget €50.5 billion over 7 years.
- ◆41% increase over FP6.

Although budget might seem enormous it cannot fund everything: priorities have been set for the whole programme based on what might be called political objectives.

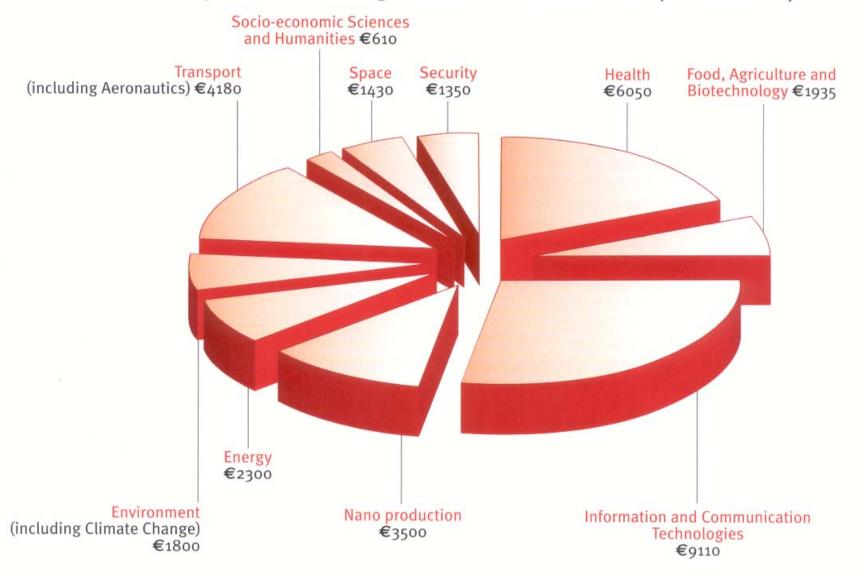
Calls for Proposals (i)

- The general direction of EC-funded research is set at a senior political level.
- ◆ This is then interpreted by the professional staff: topics and priorities for funding are identified.
- These are then converted into "Calls for Proposals" to which anyone can respond.

The indicative breakdown (€ million) of FP7



The Cooperation Programme breakdown (€ million)



General Outline of a typical area

Energy

Objective

Transforming the current fossil-fuel based energy system into a more sustainable one based on a diverse portfolio of energy sources and carriers combined with enhanced energy efficiency, to address the pressing challenges of security of supply and climate change, whilst increasing the competitiveness of Europe's energy industries.

Energy Activities

- Hydrogen and fuel cells
- Renewable electricity generation.
- Renewable fuel production
- Renewables for heating and cooling
- CO2 capture and storage technologies for zero emission power generation
- Clean coal technologies
- Smart energy networks
- Energy efficiency and savings
- Knowledge for energy policy making

Calls for Proposals (ii)

- Calls for proposals are issued at regular intervals throughout the duration of a Framework.
- ◆Not all areas or topics are included in all calls.
- Different topics will be promoted based on current research portfolio.
- ◆A budget is set for each Call and normally this is fully allocated to the "best" proposals.
- The question is how to make your proposal one of the best!

Potential Applicants

- The EC has seen that certain bodies build up an expertise in successfully applying for funding and that this can become self-perpetuating.
- It sees this as undesirable and has introduced steps to counteract this danger:
 - ◆ Training courses are laid on to explain the system especially for new member states.
 - ◆ Proposals can be submitted early for a pre-evaluation: feedback on what is weak etc. is provided by an experienced Scientific Officer.
 - Details on the evaluation process are available in detail on the internet.

Potential Applicants

The EC also provides (for each Call) a "Guide for Proposers" explaining what is required.

◆This explains in great detail what is required in the proposal – if you ignore it you will not be successful.

European vs. National Funding

- When applying to a national (Dutch) funding body there is every likelihood that those involved in selecting successful applications will know some if not all of the applicants – and vice versa.
- With EU funding it is probable that most if not all of the assessors will have absolutely no idea who most of the applicants are – and as an applicant it is almost impossible to know who will be reviewing individual proposals.

Essentially a three-stage process.

- 1. Basic Eligibility Criteria
- 2. Evaluation
- 3. Prioritisation/Selection

1. Basic Eligibility Criteria

Proposals are checked by a member of the EC Scientific Staff to see that they meet the basic criteria specified in the Call for Proposals:

- Receipt by deadline.
- Minimum number of participants.
- Within the scope of the call.
- Completeness all forms and sections complete.

1. Basic Eligibility Criteria

- If Proposal meets these criteria it goes forward to the next stage.
- If the reviewer is not sure (usually concerns scope of project) it will either be discussed further or advance with a warning that this should be checked at the next stage.
- If it does NOT meet all the criteria it is rejected. YOU HAVE
 WASTED YOUR TIME

2. Evaluation

All proposals that pass the initial filter are passed on to the next Evaluation stage.

- This is where projects are evaluated for their scientific value and graded/prioritised.
- Although there is a pass/fail element, passing is not enough: you need to pass with distinction!

Evaluation Team

- All proposals for a particular call/subject area (e.g. Wind Energy) are evaluated by a group of independent experts.
- Each proposal will be independently evaluated by a subgroup of experts (typically 3 to 5). This may be done "at home" or at Brussels.
- The experts then meet together in Brussels to reach a "consensus score" and associated comments on each proposal.
- ♦ A senior member of the Commission's scientific staff oversees this stage in an attempt to ensure that all proposals are treated fairly − i.e. that different expert groups mark to a common standard and that the "score" reflects the comments and views expressed. However it is very much the experts who determine the relative scores of the proposals before them.

Evaluation Outcome

- The projects are judged against a set of weighted criteria and receive a score for each.
- Each criteria has its own minimum threshold, plus there is an overall minimum for the total score. Thus a proposal has to exceed the minimum acceptable score in at least some categories to "pass".
- ◆ A short consensus report on each proposal is agreed by the experts (which will eventually be sent to the proposers) and complete with the scoring this will be passed on to Stage 3.

3. Prioritisation/Selection

- At this final stage all the eligible proposals have been scored. This enables a rough judgement to be made of the score that will be required to get funded. As a rule this will be considerably above the "pass mark" since the EC does not have infinite budgets: only some of the good proposals can be funded.
- This stage involving a subset of the independent experts chooses those proposals that are of most value (in terms of the priorities set), makes recommendations on possible changes (e.g. merging two proposals, accepting but with a reduced budget/programme etc.) and passes its decisions to the permanent staff for action.
- However, as a rule, the scores given at Stage 2 will not be changed and will largely determine each project's ranking in the overall list.

Increasing your chances of success:

Each stage is essentially assessing different aspects.

Some people run successful businesses finetuning proposals on a no-win no-pay basis – they have clearly convinced researchers that scientific proposals can be presented in a more favourable light.

Increasing your chances of success:

Stage 1:

This stage involves meeting some basic criteria.

If you do not meet them your proposal with be rejected – end of story.

- If the Call specifies a minimum of four partners then do not send proposals in with three partners – some people do!
- ◆ The greyest area concerns the "scope of the call". This is always somewhat open to interpretation but if your project does not really fall within the spirit of the wording then, even if it does get through this stage, it is likely to fall at the second since none of the "experts" are likely to be familiar with the topic or be in favour of it.

Increasing your chances of success:

Stage 2: Evaluation

- This stage is where you can really make a difference.
- The previous stage involves meeting some basic criteria.
- ◆ The final stage depends on the amount of funding available, how many good proposals have been submitted (and there might be an almost identical one), and the way the experts interpret the priorities of the Call.

Increasing your chances of success: Stage 2

- The criteria are clearly laid down and available to the proposers in advance.
- ◆ The experts involved at this stage cannot know everything about all the subject area. Further they have about 90 minutes to evaluate a proposal which may be over one hundred pages long. The proposals are evaluated in English (but can be submitted in any approved language and translated by EC staff) BUT for many of the experts English will be a second language. Therefore they do not have a lot of time to evaluate your proposal. So help them to give you a good score!

As an example I will refer to a recent FP7 call.

Note that the evaluation details are not unchanging – weaknesses identified in one call may lead to changes in the next. Therefore always check the website for the evaluation details for the call you are considering.

Concept Notes

- For example, one recent change is that many calls now start by asking for concept notes on which a preselection is made, after which only a limited number of proposers are asked to submit full proposals.
- This may make it more attractive to consider applying.

- This was a large Call within the Energy Component with a budget of around €140 million.
- The Call for Proposals included a range of applicable topics (for this specific call).
- Unusually, there was no budget for individual topics all proposals would compete against each other.
- Over 300 proposals passed the basic criteria.
- Their average budget was around €4 million.
- From this one can conclude that around 35 proposals will be successful or that one had a 1 in 9 chance of success.
- However, often the chances are much higher. This was the first call for Energy Proposals under FP7 and there had been a long period since the final FP6 call so there were many people wanting to submit proposals. Often the odds are more like 1 in 3 rather than 1 in 10.

- Both applicants and evaluators are provided with identical information on the Topics open for funding and it is against these details that the evaluation is made.
- As an example I will use the details
 provided for one of the Wind Energy Topics
 since these are the proposals I evaluated.

AREA ENERGY.2.3: WIND

Innovative large scale on and off-shore wind power plants based on improved technologies, more robust, reliable and low-maintenance multi-MW turbines, combined with dependable output forecasting tools as well as with standards and certification schemes should bring wind power to higher levels of market penetration. Current costs for onshore wind-generated electricity are in the range of 0.04-0.09 €/kWh.

Expected impact:

Cost reductions through improvements in technology, up-scaling of turbines, large-scale deployment (including offshore) and grid connection should lead to a cost below 0.04 €/kWh in 2020.

<u>Topic ENERGY.2007.2.3.1: Development of components and systems for turbines and wind farms</u>

Content/scope: The objective is to develop robust, reliable, cost effective and low-maintenance onshore and offshore wind energy systems which are easy to transport and to install. Issues to be addressed include the development of individual components and aggregate sub-systems (e.g. rotors, drive trains, controls) using advanced materials, design tools and validation models, and the development of innovative manufacturing procedures.

Funding scheme: Collaborative Project (large-scale integrating project) with a predominant R&D component.

Expected impact: Reduction of manufacturing, logistics and maintenance costs combined with increased power-to-weight ratio, reliability and robustness should lead to lower production costs for wind generated electricity.

Other information: The participation of SMEs is especially encouraged.

Open in call: FP7-ENERGY-2007-1-RTD

- The first point to note is that the topic is somewhat vague
 it will cover many very different ideas.
- The funding scheme indicated will allow you to work out the expected budget (here over €4m).
- Note also that the expected impact is also outlined your proposal will be evaluated against this. Many people seemed to ignore this piece of information!

The evaluation form for this call required the evaluators to mark each proposal on three criteria (with sub-criteria given as aids but not scored). To "pass", and move on to Stage 3, a proposal has to score at least 3 on each criteria (and have a total score of at least 10 (out of 15). However the cut-off score for funding in practice will be higher - perhaps 12, perhaps 13.5.

Scoring System:

- The proposal fails to address the criterion or cannot be judged due to missing information.
- 1. Very Poor The criterion is addressed in a cursory and unsatisfactory manner.
- Poor Serious Inherent Weaknesses
- 3. Fair While the proposal broadly addresses the criterion, there are significant weaknesses that would require correcting.
- 4. Good The proposal addresses the criterion well.
- 5. Excellent The proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor.
- Evaluators are encouraged to use the whole range and can use ½ marks.

The Criteria

- 1. Scientific and/or technological excellence (relevant to the topics addressed by the call)
 - Soundness of Concept and quality of objectives.
 - Progress beyond the state-of-the-art.
 - Quality and effectiveness of the S/T methodology and associated work plan

In other words, are you proposing something of quality, advancing knowledge, and have a work plan that can achieve your objectives?

And does your project fit within the Topic Guidelines?

The Criteria

- 2. Quality and efficiency of the implementation and the management.
 - Appropriateness of the management structure and procedures.
 - Quality and relevant experience of the individual participants
 - Quality of the consortium as a whole (including complementarity, balance)
 - Appropriateness of the allocation and justification of the resources to be committed (budget, staff, equipment)

In other words, have you got the right partners doing the things they are good at and a management structure that is able to ensure you reach a successful outcome?

The Criteria

- 3. Potential Impact through the development, dissemination and use of the project results.
 - Contribution at the European and/or international level to the expected impacts listed in the work programme under the relevant topic/activity.
 - Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.

In other words, what will be the impact of your work in terms of the desired impacts, and how are you proposing to exploit the outcomes or disseminate them so others can?

The Consortium

- Given the very nature of the EU, cooperation between (member) states is a key component of research projects. There are always evaluation questions concerning not only the quality of the individual partners but also the quality of the consortium.
- Many call topics give indicators such as "the participation of SMEs is strongly encouraged". You might reasonably suspect that a proposal without SME involvement is unlikely to score 5!
- Further, the evaluation team will usually be looking for genuine involvement by all partners. Adding companies with less than 5% of the budget to the consortium to impress the experts tends to be counterproductive – history shows such partners will probably get bored and fade away. So ensure all partners have a real role to play!

The Consortium

- What the Commission is hoping for is a real consortium with genuine partners from several states. My guideline is that no single partner or single country should receive more than 50% of the budget.
- Contrary to myth, there are no hidden criteria to try to correct what might be seen as imbalances in the system. In other words, unless the call clearly states that partners from CIS countries are encouraged there is no direct advantage in including partners from such countries unless they add something to the team. Similarly, despite the EC's commitment to gender equity, having women in management positions in the team does not automatically gain you extra points. Nevertheless, individual experts may see such inclusions as positive when assessing the quality of the consortium!

- What you should note at this point is that two of the three criteria are related to management-type issues – not to the scientific content.
- Why is this?
 - More problems are caused by management failings than technical ones!
 - In earlier frameworks it was seen that some apparently successful projects just came to an end – the findings were never exploited.
- Despite proposers having this information, a typical 100 page proposal will still have 90 pages of scientific justification and fewer than 20 pages on management and impact (and sometimes very many fewer!).
- Moreover, it is often very obvious that little effort has been put into these aspects. (Management- = Work Package leaders and an annual meeting; Dissemination = Web-page; IPR = we will think about this later!)

How will an expert score the following in terms of evaluating the "Quality and relevant experience of the individual participants"?

Dr Smith, a senior research engineer at Partner 1, a national research laboratory, will lead the project. The laboratory has been involved in other multinational projects, including with some of the co-proposers, and Dr Smith has recently joined us from industry to strengthen our work in the field covered by this proposal.

Note the scoring: 0 = proposal fails to address the criteria; 1 = very poor; 2=poor; 3 = fair; 4 = good; and 5 = excellent. Remember a MINIMUM of 3 is required.

Scoring the text:

- As an expert, I would have probably rated this as a 3.5.
- It leaves a lot of things unclear. Does Dr Smith have management skills? Has the national research laboratory experience of working on large multinational projects, or with EC-funded projects?
- I might be tempted to a 3 but this would almost certainly result in the project not being funded - and I like the technical objectives (but what if I did not?).
- I might be tempted towards a 4, especially if I thought the project was worthwhile, and "assume" that Dr Smith would not have been identified for this task without the right skills.

And how would I score the following?

Dr Smith has recently been recruited by Partner 1, a national research laboratory, to strengthen its project management skills and will lead the project. He has worked as a senior researcher in a similar technical area at his previous commercial organisation before being promoted to run international research projects costed at some €10 million in total. As part of his work he was responsible for his company receiving patent rights linked to a technical innovation. The laboratory has further been involved in other EC-funded multinational projects with several of the co-proposers and expects to build on the close-working relationships established.

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Scoring the text:

- As an expert, I would have probably rated this as a 5.
- It seems to answer all the points:
- Clearly Dr Smith has management skills, plus some appropriate technical background. He has run other large projects. He has also been involved in intellectual property rights. It seems like he is the ideal person.
- The laboratory has worked on similar projects, and with some of the proposed partners. However, I am not aware of it managing large EC-funded projects itself: perhaps I should only give it a 4?
- On balance, I conclude Dr Smith's individual merits overcome this slight weakness so stick with my 5 (especially if I like the technical objectives!)

Points:

- Both descriptions of the management were truthful, but the second one enables the evaluator quickly and with confidence to arrive at a very high score.
- Proposals are usually written by technical people who think this management stuff is all a bit of a bore – perhaps it is – but a few well-chosen words can make a difference (and it is not a case of lying!).

Budget

- Usually the Call for Proposals will give some indication of the expected budgets.
- Increasingly the Commission seems to be looking for large projects to reduce their own management tasks by having a few large projects rather than many small ones. In many areas anticipated budgets are around €2 million.
- Unless the proposed budget is clearly way too high for the proposed work it is unlikely to raise much comment. You will not significantly increase the likelihood of funding by trimming the budget by a few percent.
- As we have seen, management features heavily in the evaluation process so not only put effort into describing a good management structure – allow a sufficient budget (perhaps 5%-10% of the total)

Summary

Is the Call for Proposals right for you?

- Do not waste time applying in an area not covered by the Call.
- Do not stretch the terms too far you will almost certainly come unstuck at some point.

Have you met the basic Eligibility Criteria?

If you do not you will be thrown out whatever the merits of the work.

Have you provided the information the evaluators need to give you high scores and so let your proposal face the final stage with not just a pass mark but one that is high enough to receive funding?

Remember they have about 90 minutes, perhaps one hundred pages to digest, and several (sub)criteria to consider – there is not time to search for information in (or beyond) your proposal. Also they may not know how wonderful you are - if you are the world's expert on the subject then tell them you are, don't assume they will know!

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