New Framework Programme goes more bottom-up?

First details of the sixth Framework Programme: towards networks of excellence

A favourite pastime of European scientists over the last years has been to criticise the European Commission's research programmes. They all knew their lines in the chorus: the programmes are too applied, too broad, too narrow, based on a false assumption that research groups from

community—at least to those in the life sciences—that some of their complaints were heard.

The commission proposes spending Euro 16.27 billion over the next five years, together with many changes in focus and research policy. In this respect,

with the current situation in which the EC is viewed as an additional, almost external, funding agency of programmes that are separate from national research actions.

The most significant change to FP 5 is a concentration of efforts and a move to fewer topics, which will have the immediate consequence that some researchers will be excluded. Of course, this will create a stir, and the member states will reflect reactions from 'their' scientists when the document is being discussed in detail—the balance between national self-interest and sound policy for the community is always fragile at this stage. But the reality is that a programme that tries to cover all areas is beyond the financial capabilities of the EC and would carry the inevitable charge of being unfocused. Focusing has indeed taken place and it remains the question whether the correct topics have been selected. However, replacement with alternative topics rather than addition of extra ones should be the way to proceed from there.

One interesting aspect is that FP 6 plans

The draft of the sixth Framework Programme sends a strong message to the scientific community, at least in the life sciences, that some of their complaints were heard

different countries can be formed into effectively co-operating teams and that the process of selection is flawed anyway and not based on scientific criteria. The commission reacted to this criticism and asked scientists, representatives from industry and policy makers to provide their input for the next Framework Programme. After multiple calls for comments and various rounds of decision-making, a proposal for the sixth Framework Programme (FP 6) has finally emerged that will affect the funding and work of many European scientists for the next five years (europa.eu.int/comm/research/pdf/com-2001-94-en.pdf).

Many scientists regarded the predecessor, the fifth Framework Programme, as an excessive move from basic to applied research, with the easily stated but hard to realise aim to provide cures for many of society's needs. Others saw it as a necessary next step to explain the increasing costs of research to the taxpayers. The FP 6 proposal favours the first point of view, so researchers and industry, who have been among the strongest critics of FP 5 (www.actip.org/manuals/PosPapAug00.html, www.elsf.org/Discussion_document_FT.html), will welcome that development. Indeed, the draft sends a message to the scientific

community that the document is being referred to in Brussels as the 'new' rather than the 'next' Framework Programme. But details are still prone to change while the proposal is being discussed before the European Parliament and the Research Council—composed of the ministers of the member states—which will ultimately decide upon it. Indeed, FP 6 is nearer to the European Research Area that Commissioner Busquin has promoted as the basis for an EC research policy (Busquin, 2000) than FP 5. The research area is a subtle change of interpretation of

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the European treaty, which permits expenditure by the EC on research programmes only if they 'strengthen the scientific and technological base of community industry' to increase their competitiveness. FP 6, however, emphasises the role the EC plays to co-ordinate R&D in member countries. As a consequence, the EC has become a component of programmes that are potentially defined by a subset of member states, which contrasts

to define research topics before the actual call for proposals. The document states that the scientific community will be asked to identify possible topics where there is evidence that added value for Europe would be achieved through a Framework-funded project. From these suggestions, a shorter list will be selected before a specific call for proposals goes out to the scientists. This is much closer to a bottom-up approach to defining key

actions of EU programmes and it is a development that will certainly be welcomed by many European scientists.

FP 6's aim is also to provide more long-term funding for successful researchers. Furthermore, the amount of micro-management is going to be reduced, reflecting the realisation that research directions must change in the course of a

problems, particularly for smaller countries without national research policies. Although the EC-funded research programme accounts for only approximately 5% of funding in the member states, in some countries it provides up to 40% of the available investment into research. The fact that excellence will be used as an over-riding criterion also sends a message

Taking inflation into account, this figure falls even more. In the life sciences, we are witnessing a major increase in the range of research tools that are needed, so there is a real need for significantly more funding for European laboratories than the proposal requests from the member states. Obviously, this need has to be met by national as well as European funds. Perhaps the commission knows the limits of generosity that it can expect from the council of ministers and the parliament, and has fixed its goal accordingly. If so, then life scientists have to work harder to convey information about their needs to the decision makers, who appear unconcerned about spending billions on some special areas of physics but have a different scale for the life sciences.

It is important to highlight that the new Framework Programme is much closer to the wishes of the scientific community than its predecessor. It retains the emphasis on research that will provide benefits to society, while it stresses the value of

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complex project. An obvious consequence of these changes will be greater responsibility given to the contractors, which means that project management has to become more professional and active.

Another important aspect is the focus on networks of excellence. Here, the choice of integrated projects under FP 5 (Gannon, 2000) was a test bed for this new strategy. Presumably, a limited number of research locations will be selected for targeted funding under this rubric. Many scientists will support the move towards the highest scientific standards but others will resent further concentration of funds in the locations that are already among the best funded in the community. They will also see it as potentially double, or even triple, funding if the same centres already receive support for other projects. But in fact, very few research centres in Europe today are funded at a level that could be regarded as excessive, particularly when compared with equivalent institutions in the USA. In his interview with *EMBO reports* last year (Busquin, 2000), Commissioner Busquin deplored the fact that we do not have true icons of excellence in Europe that can compete with Harvard, Stanford or MIT. The move towards designated top-level research centres is probably a response to this perceived dearth.

An aspect of the text that will certainly attract concern is that there will be no room for smaller projects of the type scientists have used to equate with the Framework Programmes. 'What is more, an implementation system based on projects on a small scale is also not appropriate for the sort of research activities to be carried out at a European level,' the proposal states. This will certainly create

that FP 6 will not be a source of support for brave groups that, despite not being leaders in the field, work hard to remain in the peleton of scientific research, which will further add to the stratification of groups in Europe.

Less controversial is the plan to increase the investment in 'human potential' in the form of fellowships and net-

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works to provide training through small research projects. At present, the success rate for applications for EU postdoctoral fellowships is suprisingly high at approximately 40%. Given the general trend of falling numbers of postdoctoral researchers, it is unlikely—and would be ill advised indeed—simply to increase the allocation of funds for that activity. But excellent groups working on topics that are not included in the selected thematic areas should be encouraged to focus on this part of the package. The 'oversight', as some would regard the lack of provision for funds targeted to those in their first independent research job, could also be corrected through this section.

The exact meaning of the infrastructure section and the practical consequences of the outlined financial rules—which seem to suggest that FP 6 will provide support of only up to 50% of the costs—still remain to be clarified. There is a bottom line, however, that should be mentioned: the proposal asks for a 17% increase in funding, which is probably an increase of 5% per annum over the period of FP 6.

undiluted excellence and calls for a more active role of scientists in defining the specifics of the programme. The fact that the commission has listened to the scientists when drafting FP 6 is very positive. It looks like the first step to a future (the next after the next?) Framework Programme that will be accepted as the pinnacle of research support and delivery, and a model on which national programmes should be based.

References

- Busquin, P. (2000) A European research identity. *EMBO Rep.*, **1**, 96–99.
Gannon, F. (2000) The discovery of functional genomics. *EMBO Rep.*, **1**, 386–387.

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