BIS | Department for Business Innovation & Skills

EU Framework Programme: Call for Evidence response form

This form is available to download from www.bis.gov.uk/fp8-call-for-evidence.

URN: 10/1177RF

The Department may, in accordance with the Code of Practice on Access to Government Information, make available, on public request, individual responses.

The closing date for this call for evidence is 4 January 2011

Name: Ian Haines
Organisation (if applicable): UK Deans of Science
Address:

Please return completed forms to:
Amy Ackroyd
International Science and Innovation Unit
Department for Business, Innovation and Skills
1 Victoria Street
London SW1H 0ET

Tel: 020 7215 1211
Email: Amy.Ackroyd@bis.gsi.gov.uk

Please indicate your affiliation:

☐	Government Department or Agency
☐	Research Councils and the UK Research Office
☐	Research Institute
☐	Public and Private Research Bodies
☐	Devolved Administration
☐	Regionally-based special interest group
☒	Funding Council University representative organisation
☐	National Academy
☐	Professional Institute

☐	Trade Association
☐	Major Research Charities
☐	Universities
☐	Industry
☐	SMEs
☐	Individual researcher from a university
☐	Individual researcher from industry
☐	Other (please describe):

Question1: What should the UK's high-level objectives be for FP8?

We should strive to ensure that FP8's high level objectives mirror as far as possible those of the UK's economic and innovation strategy.

Question 2: How can FP8 help deliver economic growth throughout the life of the programme and beyond?

It must have as its focus:
- supporting the best research in science and technology wherever it is to be found
- seeking greater value for money from all projects
- ensuring that, if the FP7 principles of Cooperation, Ideas, People, Capacities and Joint Research Centres are retained for FP8, their interpretation when deciding which projects should be funded do not over-ride the need to identify and support the most fruitful areas of research and the most able research teams
- minimising the cost of bureacracy.
Please also see responses to certain other questions.

Question 3: How should FP8 support the wider European context including Europe 2020 and the European Research Area?

The most important of the five targets of Europe 2020 is the intention of achieving an investment of 3% of Europe's GDP in R and D and innovation. It is revealing to recall that the numerical target of the Lisbon Strategy which was agreed in March 2000 was for 3% of GDP to be spent on R and D by 2010. Analysis of the decade up to 2010 indicates that even without the financial crisis created by the banking sector it was very unlikely that the 3% figure would have been reached by 2010. Simply resetting it for 2020 when some of Europe's international competitors are committing to major increases in such expenditure is hardly ambitious. As much of the emphasis of FP8 as possible therefore needs to be devoted to activities that will leverage extra investment for R and D in Europe so that the 3% target might be reached well before 2020.

Question 4: The study *Impact of the EU RTD Framework Programme on the UK* has indicated a number of broad benefits to the UK of the programme. Are these benefits identified appropriately and there other impacts that should be considered in addition?

The Technopolis report appears to cover all possible benefits and impacts for the UK. However, there is still a need to find better methods of assessing the true value for money and "value added" from Framework Programmes.

Question 5: How can FP8 make a positive contribution to the UK economy – and the low-carbon economy in particular?

If UK universities and companies can be supported to bid for FP8 funding there is reason to be confident that they can be even more successful than in previous Framework Programmes. Such success could compensate for what is going to be a real-term decrease in government research funding caused by the recent CSR decisions. However, to be successful universities will need to have appropriate expenditure on research infrastructure which requires timely and regular investment in the research facilities and an immigration system that puts the importance of international researchers (at all levels) above others (for example, professional footballers).

It should not be assumed that only applied research, directed at specific low carbon initiatives will lead to major breakthroughs.

Question 6: How can FP8 support innovation in the UK?

Much more can be done to support innovation in the UK. The UK's university Science Faculties have shown their willingness and ability to engage in innovation, the innovation agenda can best be achieved by FP8 supporting engagement by business and government in a triangular partnership with HEIs to increase employment opportunities for reseach personnel at all levels - from the early stage researcher (PhD student) to the Principal Investigator.

Question 7: What are your views on the split of the FP7 budget between these specific programmes? Should this change in FP8?

We wish to preface our remarks here (and the associated response to question 8) by noting that it is still too early to make informed judgements on the success or otherwise of FP7. The review that was carried out in the Spring/Summer of 2010 by the Expert Group that produced the Interim Report of the Seventh Programme was, in our opinion, far too early in the FP7 cycle (2007 to 2013) to generate any real evidence of success or failure except in the most general terms. This is not to suggest that the Expert Group and those who supported them

were not up to the task, but even they, in their report, admitted to only being able to come to 'tentative' conclusions. Dissemination of results and cooperation across Europe are not substitutes for impact and innovation. FP8 must not be straitjacketed by conclusions about the success of FP7 reached in the next year or so. While it may be necessary to define interim allocations to various programmes, the initial structure of FP8 must be sufficiently flexible that changes, possibly of a significant nature, can be made after it has begun.

We believe that the most innovative and productive work will be carried out where there is the least restriction on who needs to be part of a bid. We would also support more open calls in FP8 within the broadest statement of the scientific and technological challenges facing the EU as this is how FP8 will attract the very best people and deliver the most innovative and radical solutions.

Question 8: Which areas of Framework Programme funding provide the most EU added-value (see paragraph 6)? And which the least?

There appear to be occasions when the expectations of proposals in terms of Cooperation and Mobility mean that funding is allocated to collaborations that already exist. It is understandable that the EU has a political imperative to drive the greater integration of the people of Europe. However, such requirements for cooperation can distort the overall outcomes of FP investment.The nature of the current challenges facing Europe (for example, the failure to achieve the target of 3% of GDP being spent on R and D, the financial collapse and the the major scientific challenges of climate change, sustainable development, health inequality and the economic rise of India and China) demand much greater emphasis on supporting the best researchers and innovators. We therefore recommend in qualitative terms that there should be less emphasis on the numbers of countries and partners that are required in a project. In quantitative terms this may mean a reduction in the allocation for Cooperation to less than 50% of the FP8 budget , a decrease in funding for People and Capacities, and an increase in allocation for Ideas to at least 30% of the available funds.

Question 9: Can efficiencies be found in the Framework Programme because of overlaps between different areas of funding?

Apart from the need for enabling technologies that are required in almost all areas of scientific research, there are inevitable overlaps between the various thematic areas. For example, elements of the study of health, food, agriculture, fisheries have shared interests; health and healthy lifestyles, in particular, have a need for inputs from the social sciences. Such overlap and parallel working need not be wasteful of resources provided that potential breakthroughs between the disciplines can be recognised and communicated across the disciplines

by project leaders. This can be achieved by emphasis on all parties sharing their results on a very regular basis.

The search for such efficiency should not be applied too strictly nor should it require a large bureacracy to achieve it.

Question 10: What are the arguments for and against FP8 moving towards funding research and development which addresses grand challenges?

With the amount of money being allocated it is impossible to argue against FP8 being expected to address at least some of the grand challenges however these may be defined. What matters is the approach that is taken. Even if it were decided to set up large Joint Research Centres to address each challenge it should be recognised that however much of the total budget is allocated to a centre, it could (a) take a considerable time to build and staff such a facility and (b) the R and D budget of a single major multinational company would dwarf the funds available to it.

If grand challenges begin to take a significant part of FP8 funding many researchers will find ways of presenting their work as having relevance to them. Such bids for funding can seem very credible but need a very informed, firm and thorough analysis.

There is a danger that FP8 will be dominated by the notion that the grand challenges need to be centred and funded in a single location. Experience shows that decisions about such funding and location are too often based on political or pragmatic, but scientifically irrelevant, grounds (for example, the availability of a site, or willingness of a country to subsidise the facility) rather than factors that will ensure its success.

Question11: Which grand challenges (see above) are best tackled on an EU-wide rather than a national level? Within these areas which particular aspects would benefit from an interdisciplinary focus?

The Council of Europe needs to define its grand challenges more clearly than in the conclusions adopted at the Council meeting of December 2008. Some can be interpreted as Europe-centred (for example the ageing of the population), while climate change and water supply are global (as well as European) issues. The fundamental science and technology of climate change, ageing, energy, water and food supplies, banking and security are universal. However, dealing with each of these depends to a greater or lesser extent on the sociology of different populations and thus may have national or even more localised solutions. In the latter category are potential solutions to energy, water and food supply (and underlying developments in the agri-food industry). If FP8 is to have a role in researching the grand challenges, it needs to ensure that it supports the more fundamental enabling work,

leaving the applications of the innovative scientific and technological solutions to individual countries and relevant industries.

Question 12: How should FP8 engage with countries outside the EU or associated to the Framework Programme in addressing global challenges?[1]

We do not have a detailed view on this, but it is essential that FP8 can support alliances with those outside the EU who are leaders in the creation of scientific and technological solutions.

Question 13: Should FP8 still provide some thematic focus e.g. in areas such as space and transport? Should any of the current themes be re-visited over the course of FP8 – and if so, how?

This depends firstly on whether the grand challenges are adopted as the focus for FP8. If they are then several of the themes become at least partially redundant. But if the grand challenges that are embraced by FP8 are merely those exemplified by the Council meeting of December 2008 then several of the thematic areas need to be retained. For example, health is not just about ageing, biotechnology is not only concerned with food and water supply, and ICT and nano- and other production technologies might not be assured of much support.

Question 14: What should be the role of key enabling technologies e.g. ICT and nanotechnology in FP8?

They must have a distinct, clearly defined role and be properly funded. The grand challenges will not be solved using only current science and technology so these must be further developed alongside the multi-disciplinary challenges.

Question 15: Services form a crucial part of the UK economy. Should research into services be addressed specifically in the Framework Programme, and if so, how?

Services, apart from those of a technical nature (or finance/banking), often have a national focus. Probably the most significant reason for the UK's low R and D expenditure as a proportion of its GDP is the failure of the service sector to invest in research and development. While the availability of a tranche of FP8 funding for the service sector might

[1] FP7 participants can in principle be based anywhere. There are different categories of country which may have varying eligibility for different specific and work programmes: the EU-27; associated countries– with science and technology cooperation agreements that involve contributing to the framework programme budget; EU accession candidate countries; and third countries whose participation is justified in terms of the enhanced contribution to the objectives of FP7.

stimulate a change in this sector, we believe that this is not the best use of FP8 funding.

Question 16: What are your views on how the Framework Programme allocation for collaborative research should be apportioned between themes; enabling technologies and underpinning areas of research e.g. social sciences and humanities?

We believe (see question 13) that the so-called grand challenges need to be much better defined before this question can be answered.

Question 17: To what extent should ERC funding focus on supporting frontier research? Are there other areas in which ERC could add value?

If Europe is to realise the aims of "Europe 2020", including optimising support for R&D and innovation, unleashing the potential of the digital economy, improving resource efficiency, reducing greenhouse gases emissions, modernising the industrial base and having 3% of the EU's GDP invested in R&D by 2020 it must focus on supporting frontier research.

Question 18: Should ERC's current emphasis on funding a single investigator continue into FP8?

Categorically yes.

Question 19: Are there any options that could better link ERC activities with private sector interests?

No comment.

Question 20: What priority should researcher mobility and skills development have in FP8? What is the best way to address this?

As noted above (question 8) researcher mobility has featured in Framework programmes as a means of increasing the cohesivness of the peoples of Europe. It is time to treat mobility more as a natural and evolutionary process - with researchers choosing to move to where the research is most interesting or where they can gain new knowledge or access to special facilities. Mobility per se should be less prominent in FP8.

On the other hand, skills development needs continuing attention and it would not be unresonable for major projects under FP8 to be required to indicate how the research skills and other professional skills will benefit from the projects being proposed for funding, but we would not support the use of FP funds to develop Doctoral Schools.

Question 21: The capacities specific programme currently covers several policy initiatives relating to capacity-building. Which of these are of most value? Are there other areas which would merit funding?

The most significiant area of capacity building for Europe would be in supporting more SMEs to become users of research and development. In addition to this, for economic, political and moral reasons FP8 should ensure that it encourages research and research contacts of relevance to the new emerging economies (for example, Brazil, China and India) as well as those parts of the world whose economies and research infrastructure are less well developed.

Question 22: What should the relative priority be for the Joint Research Centre under FP8? On which activities should it focus?

We are unconvinced of the need for the Joint Research Centre

Question 23: Please comment on the COST framework and its links with the Framework Programme

The potentially most useful part of COST is where it can be used to create connections with the scientific communities of emerging countries.

Question 24: Should FP8 directly support activities aimed at integrating the three sides of the knowledge triangle e.g. KICs?

Yes.

Question 25: Which instruments (e.g. JTIs, article 185 initiatives) should be retained for FP8? Are any new instruments required?

While it would be inappropriate to remove funding from the current initiatives, each should be assessed over the next 5 years to decide if they are any longer appropriate. We would not support the creation of numerous new initiatives under FP8. It should be left to individual governments to generate additional initiatives of this kind.

Question 26: Please comment on the Risk Sharing Finance Facility. Should a scheme of this kind be included within FP8?

The risk sharing facility is a useful instrument and should be retained for FP8. However, there is a need to find better ways to enable universities and SMEs to access these funds and for evidence to be found that the facility positively affects decisions by major international companies to further invest and develop within the EU.

Question 27: What should the balance be between funding large-scale programmes e.g. the article 185 *programmes* above and smaller *projects* individually administered by the Commission?

Supporting many relatively smaller scale projects is likely to result in many more significant scientific advances.

Question 28: What should be the role of public-private partnerships in FP8?

UK Deans of Science do not have a view on this issue except that it they are to be part of FP8 such partnerships need to be drawn up with a view to ensuring value for money and an appropriate sharing of risk and profit and they must not alter the fundamental purpose of the Framework Programme.

Question 29: What lessons from evaluations of previous framework programmes can help with the development of FP8?

There need to be simpler funding rules with clearer information in plain English (and other EU languages) that makes it easy to apply for funding.

Question 30: What steps could be taken to ensure that knowledge gained from FP8 is disseminated and exploited – and remains easily accessible over time?

All knowledge gained that is not confidential (for example, relating to national security, etc) or commercially sensitive must be made publicly accessible in a timely fashion. Of course, this alone will not ensure that there will be the necessary translation of ideas into the market. This requires more emphasis within the FP8 funding framework on innovation that generates real products, services and solutions to the world's health, climatological, economic and sustainability challenges.

Question 31: Would any proactive effort to alter the current balance of funding between universities, research organisations and businesses be appropriate or effective? If so, what might be involved?

We know of no convincing arguments for changing the current balance. If there were a decision to change then it should be based on evidence that it would lead to the leverage of more R and D investment from individual governments, industry and other funding sources.

Question 32: What could be done at EU level to encourage more businesses – especially SMEs - to apply?

Within science, many small companies survive solely on their very high level of intellectual capital and inventiveness. The critical factor is how

to make other SMEs recognise the usefulness of research and development. The efforts of the Bologna Process to encourage the professional development of doctoral and postdoctoral researchers is helpful but the scientific and professional skills of such people need to be marketed much more persuasively to small companies.

The information on FP8 need to be sufficiently straightforward that an SME can find, understand and act on it in a cost effective way.

Question 33: What could the Commission do to reduce bureaucracy of FP8 over and above the current simplification proposals (including changes to the Financial Regulations and Implementing Rules)?

It would be helpful if the issuing of calls could be made to a simple, regular, predictable timetable that is sufficiently infrequent as to make it easy for reseachers to follow and respond when appropriate. The rules need to be made so simple and transparent that there is no need for those wishing to apply to have to employ the services of consultants or manitain separate offices of "experts" to help them negotiate what many still regard as a minefield of jargon and understanding of key words.

Question 34: Is there a role for a two-stage applications process analogous to that used by the Technology Strategy Board[2]?

Yes.

Question 35: Should the programme move away from a cost/input-based funding model to one based more on results/outcomes/performance?

Companies may be able to work within this model by funding a project through cross-subsidy from other activities or by borrowing until the results produce a payback, but universities would generally find it very hard to operate within such a regime for most scientific research and development. It needs to be remembered that the outcomes of research are not predictable so if a results/outcomes model were to be used there may be a reluctance from universities to take on the potentially very high financial risk.

Question 36: Should the rules on intellectual property in FP7 be changed for FP8?

No comment.

Question 37: Is the proportion of overheads funded by FP7 appropriate? Should this be adapted in FP8 to create more consistency with other sources of funding?

---

[2] For details of Technology Strategy Board processes see www.innovateuk.org

There is no reason why European funding should not properly and fully cover appropriate overhead costs (within universities some of these may be shared with non-FP-funded projects).

Question 38: Within the current UK public expenditure constraints[3], could the UK do more on a cost-neutral basis to encourage participation in FP generally?

In its dealings with the Framework Programme and all other related discussions the government should be pressing for a more user-friendly FP8 and one which is aligned with the areas of research and development that will be attractive to, and play to the strengths of, UK universities and industry.

Question 39: How effective are the current UK support services?

UKRO and the Europe Unit are both helpful sources of advice but, given the current complexity of framework programmes, are probably understaffed.

Question 40: What could be done at UK level to encourage more businesses – especially SMEs - to apply?

The answer here is similar to that for question 32 above, with universities, RCUK and the Department for Business, Innovation and Skills all pressing the case with SMEs that doctoral and postdoctoral skills can transform small businesses. This might be encouraged by a scheme that supported the "loan" of a doctoral or postdoctoral candidate to SMEs for a limited period in the same way as other schemes have operated to suport them on business issues.

Question 41: Are there any lessons from other countries that could help raise UK participation?

We are not aware of any.

Question 42: Please add additional comments here in relation to UK interests in the Framework Programme.

If FP8 can be made to address appropriate scientific challenges (and be made more user-friendly) it can be a real opportunity for UK science. However, it is constrained by the funding available at at time when many of Europe's competitiors are incresing their investment. It is worth noting that the amount of money available could be altered without adding to the overall EC budget by transfer of money from other

---

[3] See http://www.hm-treasury.gov.uk/spend_index.htm

budgets. In this regard we would wish to mention that merely moving 10% of the Common Agricultural Payment Subsidy into the FP8 budget would almost double the amount available for FP8.

We also wish to re-emphasise the need for FP8 to be made much simpler with easily understood web-based material making it easy for applicants to understand what is required. There are too many calls for bids, rolled out at too many times in the year and they often appear over-complicated. Just as one example it seems somewhat excessive that it should be necessary to have a two day networking event (ICT Proposers' Day 2011, 19 - 20 May 2011) in Budapest for academics, the business sector, SMEs and government advisers to exchange ideas for participating in an FP7 ICT call. It is hardly surprising that hard-pressed SMEs may not become involved in such events unless they are certain of a successful outcome.

Do you have any other comments that might aid the consultation process as a whole?

No.

Please use this space for any general comments that you may have, comments on the layout of this consultation would also be welcomed.

Thank you for your views on this consultation.

Thank you for taking the time to let us have your views. We do not intend to acknowledge receipt of individual responses unless you tick the box below.

Please acknowledge this reply ☒

At BIS we carry out our research on many different topics and consultations. As your views are valuable to us, would it be okay if we were to contact you again from time to time either for research or to send through consultation documents?

☒ Yes ☐ No