EU Framework Programme: Call for Evidence response form

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

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Question 1: What should the UK’s high-level objectives be for FP8?

To advance knowledge, stimulate high-quality collaborative research, support overall wealth creation, enable technology development and provide trained individuals across the ERA. All of this will provide world-class training for graduate students and postdoctoral researchers, strengthening the UK’s position as a centre of innovative and exciting research. There is also a need to ensure that a clear balance is struck between close-to-market R&D and more speculative, curiosity-driven research within FP8.

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

It is essential that there continues to be a good supply of curiosity-driven research to provide the seed corn for the future, supported by strong management and the flexible use of resources. Too strong a focus on economic deliverables on the typical timescale of an EU project will severely limit creativity and novelty in research, strongly compromising long-term economic competitiveness. The Framework Programmes have an essential role to play in coordinating and driving world-class research in Europe.

However, there may be a need for some individual projects within FP8 to be highly focused, with economic deliverables treated as a key outcome. But this can be difficult to get right in a long-term high-technology project because of the pace of external change. Thus, in larger and longer projects, there could be quantified deliverables at stages during the programme to gain the maximum economic benefit and value from any generated intellectual property. Beyond the programme, economic benefit is related to the suitability of the project to the market and the ability for it to be marketed through licensing, etc.

Question 3: How should FP8 support the wider European context including Europe 2020 and the European Research Area?
The interface between the Framework Programmes, ERA and Europe 2020 is unclear. Where Europe 2020 defines in part the percentage of GDP to be spent on R&D across the EU, other than the climate change target, it is not clear how this drills down into either the Framework or to the ERA’s targets.

**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?

Benefits and impacts will have been diminished because of poor support within the UK for applicants. For many people in the UK their access to detailed points of contact or repositories of knowledge about how to use and work the European Commission system is poor, which is something that needs to be addressed.

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

It should be made clear that this includes all aspects of low-carbon, not just windmills, etc. FP8 should fund Europe-wide/international research into technologies that reduce waste and reduce the use of energy, and into alternative energy sources such as fusion power.

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

The UK government needs to find a healthy balance between the need to fund curiosity-driven research and the translation of knowledge into products and services that can contribute to UK GDP and the need to prioritise research to address the major societal challenges. More attention needs to be given to where the barriers actually are within the UK’s science and innovation base, such as the lack of investment in transitional research and industrial capability that would allow the more direct products of curiosity-driven research to be widely exploited by UK companies operating within the UK. In terms of FP8, it needs to offer a flexible framework to facilitate innovation and therefore economic growth.

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

*We are concerned about the split which obviously favours cooperation over ideas, people and capacity.*

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

*No comment.*
Question 9: Can efficiencies be found in the Framework Programme because of overlaps between different areas of funding?

Probably not; but simplifying processes will be very important.

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

A balance is required to be open to the unexpected development coming from an unanticipated quarter. In addition, clarity is required to define whether FP8 is a mechanism to deliver enhanced economic growth to the EU and over what period.

Question 11: 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?

Probably all of them.

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

FP8 needs to be supportive of projects (including with funding) that involve partners from outside of the EU, if it can be determined that part or all of the economic benefit will remain in the EU. This would allow competitive issues within the EU, or where unique processes or intellectual property for a given project lie outside of the EU.

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 revisited over the course of FP8 – and if so, how?

No comment.

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

Enabling technologies are important. But in FP8 greater effort should be made on developing these enabling tools as integrated services and on facilitating their timely exploitation; and there is also a continuing need to support R&D.

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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.
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?

If there is high-quality research in 'services' it should be tensioned with other things and not explicitly mentioned as an objective; the EU already has too many silos, grand challenges, etc., which get preferential treatment.

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?

Need to allow flexibility to promote interdisciplinarity and avoid silos.

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

The ERC must maintain its strong focus on frontier research. The ERC has been uniformly praised by academics for its commitment to curiosity-driven research. It is becoming increasingly difficult to get funding for this type of research in the UK, which has the potential for ground-breaking/world-changing discoveries and, ultimately, huge socio-economic impact. The ERC recognises the key importance of curiosity-driven research: “Frontier research (including frontier technologies) which is at the heart of the ERC mission, charts the territory of the unknown and is indispensable for any flagship initiative foreseen in the Europe 2020 strategy”; this must continue. In addition, it is worth noting that the ERC has gained respect because it has no 'social engineering' component.

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

Yes, the focus on a single investigator should continue. The ERC, unlike every other FP7 initiative, is associated with a relatively low level of unnecessary bureaucracy. Moving away from the single investigator focus will lead to a sharp increase in the degree of bureaucracy.

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

The vast majority of FP7/FP8 funding programmes necessitate strong linkage with the private sector, and the aim should be to link to the private sector that will be around/involved at the end of the project. Some present approaches favour links to sectors that are already ageing.
In addition, the ERC should maintain its commitment to fund research based only on scientific quality.

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

The Marie Curie networks have had a very positive impact on the scientific expertise, transferable skills, and overall confidence of students and postdoctoral researchers. Although early stage and experienced researchers should be exposed to an industrial environment during their training, the strong focus in FP7 on close industry participation has had the effect of requiring projects to focus on near-market goals (otherwise it was difficult to get industry involved). A focus on near-market R&D does not necessarily produce young scientists with state-of-the-art expertise. In addition, there is a need to ensure that there are a variety of mobility patterns so that parents with young children or other caring responsibilities are not disadvantaged or forced to spend extensive periods away from home.

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?

They all sound good.

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

The JRC's functions should include advising on technology trend and requirements.

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

No comment.

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

The concept of the KICs to bring business and academics together sounds reasonable.

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

The Eurostars concept is particularly well suited to technology development and proliferation and should be greatly expanded. Eurostars is a good model of EU collaboration with direct relationship to commercial product development, i.e. partners from two countries, a typical 2-3 year project lifetime and a defined period to develop a
prototype. However, in the case of Eurostars, the funding pools are relatively small compared to the normal EU programmes and there is little harmony in funding amounts or policy in the participating countries.

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

No comment.

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?

No comment.

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

No comment.

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

There a number of things that can be done:

i) Simplify processes.

ii) As mentioned earlier, for many people in the UK their access to detailed points of contact or repositories of knowledge about how to use and work the European Commission system is poor. The dissemination of key information and contacts is so much better in other countries such as Ireland, which is a smaller country. This needs to be addressed.

iii) There is a need to monitor oversubscription rates for the various programmes and adjust funding accordingly, so that a lot of proposer time is not wasted writing applications which have a small chance of success.

iv) A strength of FP7 is the reliance on consortia to synergistically provide new and innovative solutions. However, in some cases the requirement for numbers of members and the bureaucracy associated with the management of the consortium can be overwhelming and act as a barrier to entry to some projects.

Question 30: What steps could be taken to ensure that knowledge gained from FP8 is disseminated and exploited – and remains easily accessible over time?
Whatever steps are taken to ensure that knowledge gained is exploited, these must recognise that the research has been publicly funded and that this places an obligation on the funder with regard to intellectual property rights and patenting strategies.

Academic dissemination of research results via publication in the traditional scientific literature represents the best mechanism of ensuring that FP8-funded work remains accessible over time. The importance of formal publication and dissemination is, unfortunately, often overlooked. A number of researchers have found strong evidence that publication in the traditional scientific literature represents a key mechanism of knowledge transfer between academia and industry.

In addition, an efficient KTN system, like that operated through the TSB, would be useful if it does not already exist.

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?

No comment.

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

Please see the last paragraph of our response to question 29.

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)?

There is a widely held view that unless you are an expert in completing the EU application paperwork then the ability to succeed with a project is greatly reduced. At the moment, FP7 grant proposals require a staggering amount of repetition, paraphrasing, and parroting of EU research objectives. The average length of a proposal could be reduced by at least 50% with no change to the information content. In truth, the entire EU grant proposal format needs to be overhauled, coupled with a need to improve support and advice within the UK for proposers.

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

Given how oversubscribed EU funding schemes are (including the ERC), it is unhelpful that full proposals with all financial details are required at the initial stage. This results in most of the best scientists in Europe devoting weeks of effort each to a process that is guaranteed at a very

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2 For details of Technology Strategy Board processes see [www.innovateuk.org](http://www.innovateuk.org)
high precision to end in being a waste of time. The limited time that the best people have available is far too precious to be thrown away like this. What is needed is a 'phase I' proposal that concentrates on scientific quality, and which is followed by the full details only when the chance of success has risen to something reasonable.

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

Outcomes and impact may only appear some decades later, which makes it difficult to judge using these criteria.

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?

The proportion of overheads funded by FP7 is not appropriate nor acceptable. However, it is doubtful whether the European Commission will look favourably on increasing the overhead contribution to a level commensurate with fEC, but the UK should lobby hard for this, as the current regime requesting matched funding and giving very small overheads makes it extremely difficult for UK universities to participate.

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

The UK should closely at how Ireland encourages participation in the Framework Programmes.

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

As stated several times already, UK support services are poor compared with other European nations, such as Ireland, and there is a need to improve the dissemination of key information and contacts. Currently, the UK is plagued by a support system that largely just passes on European Commission information un-filtered or without added value.

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

3 See http://www.hm-treasury.gov.uk/spend_index.htm
There is a need for greater promotion of the benefits of participation, and the provision of clear advice on the application process.

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

Yes, as mentioned, the UK should carefully review how Ireland encourages participation in the Framework Programmes.

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

No comment.

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

The IOP will be having its own review of FP8 in March 2011 and would be pleased to forward further insights to BIS then.

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