



European Association for Chemical and Molecular Sciences

EuCheMS input to consultation on the Seventh Framework Programme

Implementation of FP7

Implementation of FP7	
1. Is the current level of FP7 funding sufficient to achieve its objectives?	Not sufficient
1a. Is the current level of FP7 funding sufficient to achieve its objectives? - Comments	We very much welcome the support and increasing importance given to research and development at a European level. However, the amounts are still insufficient to meet the ambitions of the Europe2020 strategy and its predecessor the Lisbon Strategy. A recent study by Imperial College London (2010, Haskel) found that government funded research was more effective than other measures, such as tax incentives, in improving innovation. Haskel estimated that in the UK alone the £3.5 billion a year spent on university research generated an additional annual output of £45 billion in UK companies. At a time of economic crisis Europe needs to focus more resources on funding that produces growth and renew its commitment to a knowledge based economy. Research funding also helps us find solutions to some of the EU's most pressing concerns, such as climate change, creating a resource efficient Europe, finding alternatives to shortages in raw materials and dealing with some pressing health and well-being issues. DG Enterprise's High Level Group (HLG) on the Chemicals Industry, has highlighted the vital contribution that this sector makes to the EU's economy, the HLG recognises the need to support R&D in this sector, to support sustainable economic growth. At a sectoral level the links between basic research funding and the creation of internationally competitive industrial performance, in the case of chemicals and pharmaceuticals, is relatively direct and clear (1996, SPRU). In other areas technological foresight and a longer view is needed. As well as additional funds we would also like to see FP7 work more coherently with other Funds, most notably, the Structural Funds could do much more to support education, skills, innovation (that is research and its attendant commercialisation) and research infrastructure. Venture capital schemes supported with ERDF (European Regional Development Fund) and EIB (European Investment Bank) schemes must be less risk averse and provide greater support to knowledge transfer, innovation centres and university spin-off companies. We welcome the creation of the Risk Sharing Finance Facility (RSFF). The ESF (European Social Fund) should focus on the skills needed to support innovation, at a European level it is most appropriate to encourage the higher level skills, whilst using the Open Method of Coordination, to develop more basic skills.
2. To what extent are FP7 research activities likely to produce enduring impacts?	Highly likely

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2a. To what extent are FP7 research activities likely to produce enduring impacts? - Comments	The best way to ensure an enduring impact is to promote excellence. We congratulate the European Commission for the creation of the ERC and a researcher driven approach. A bottom-up approach is the best way to ensure that the most cutting edge and inventive solutions are produced, these solutions will be the most enduring – regrettably they are also, by their very nature, the least predictable. This requires political and administrative courage. However, whilst there must be risk, these risks are easily defended and must be defended : We know that industry alone, cannot provide the research funding necessary for blue skies, breakthrough, technological development – and if the European Union exhortation to be a ‘knowledge based economy’ has any meaning, it must support ground breaking technological development. We know that publicly funded research is the most viable way to fund developments where there isn’t an immediate commercial or practical benefit. The market is not yet able to do this. We know that skilled researchers with the most up to date skills are best placed to turn basic research to economic benefit. The Marie Curie Industry-Academia Pathways and Partnerships (IAPP), is a good example of a tool to support this sort of knowledge transfer. Research is central to addressing the ‘Grands Societal Challenges’ outlined in the Lund declaration. It is also central to meeting the Europe 2020 objectives. FP7’s Cooperation Programme, identifies European interests that need scientific solutions, research emanating from the Cooperation programme is designed with a specific European objective in mind. The Cooperation Programme takes a more ‘top down’ approach. Whilst responsive funding is needed, we feel that there should be a better understanding of the innovation chain from basic research to exploitation, a research driven approach should also be encouraged in the Cooperation programme.
3. Has the implementation of FP7 been effective?	Generally yes, but with some major problems
3a. Has the implementation of FP7 been effective? - Comments	The European Research Council has been one of FP7’s success stories. However, there are some administrative and organisational problems with the ERC. In particular, the panels most closely associated with the chemical sciences (PE4 and PE5) are heavily over-subscribed, because of Chemistry’s pervasive nature; most proposals will have a chemistry dimension. If we want to promote inter-disciplinarity and multi-disciplinarity we must have more experts and more panels to evaluate chemistry related topics. EuCheMS is establishing an expert group on the ERC, this group will identify our key areas of concern and where we think positive changes could be made to ensure the future success of ERC. We would hope to work closely with the Commission and ERC over the next six months.
4. Are you aware of the measures to simplify the Framework Programmes and in your view have they been successful?	Aware and believe they are partially successful

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4a. Are you aware of the measures to simplify the Framework Programmes and in your view have they been successful? - Comments	We welcome the Commission's recognition that there is a need for simplification. More simplification is needed and it must be thought through now, as the Financial Regulation is currently being reviewed. We would like three principles to underpin any future simplification. Simplification must be aimed at simplification for the end users - industry, SMEs and researchers are FP7's clients, there needs to be a complete change of focus, ideas such as 'lump sum' grants should be carefully checked and verified with potential end users before they are introduced. We would strongly advocate a science based approach, as opposed to a results centred approach. The Belgian Presidency recently organised a meeting on simplification where this initiative caused a great deal of concern with research and business stakeholders alike. There has to be a reduction in bureaucracy and a decision to take a trust-based and risk-tolerant approach. The tolerable risk of error should be increased and a clear distinction made between error and fraud. The default position should be the acceptance of the usual accounting and management principles and practices of the beneficiary, with the onus on the EU to justify additional practices . There needs to be greater harmonisation between different instruments, clearer terminology (consistently understood by Commission officials) as well as simplified and faster application and payment procedures.
5. What are the key achievements / strengths of the Framework Programmes in general and FP7 in particular?	The greatest development under FP7 has been the introduction of the ERC, whilst it is imperfect, it is still greatly welcomed by the research community.
6. Are there shortcomings in the Framework Programmes in general and the FP7 in particular that you think should be corrected?	Of great importance is the participation of SME. Their involvement should be increased in particular that of small enterprises of high quality. Some of them are not aware of the possibilities offered by the Commission programmes. Therefore, it might be useful to find a way to assess SME needs, perhaps taking an inventory approach to the activities performed by all SME in order to make easier their possible contribution in different programmes.
7. What would be the priorities in your own area (funding, research, and implementation) for any future Framework Programmes?	In a multi-disciplinary world Chemistry and the Molecular Sciences have the most pervasive presence – molecular biology, material science - nanotechnology, healthcare, energy, waste management... all require the chemical sciences. The activity of design, synthesis and analysis is, in itself, very multi-disciplinary. To be the best and to compete in a global market, our chemical sciences must also be of the highest level. This means that there must be more resources for cutting edge, frontier research in the chemical sciences. We would like to see greater recognition of the inter-disciplinary role of the chemical sciences and their role in the cooperation programme themes. This can be ensured by ensuring that this group is involved in the development of the current and future framework programme. EuCheMS (European Association for Chemical and Molecular Sciences) is a non-profit-making organisation, having 47 member societies which represent some 140,000 individual chemists in academia, industry and government in 34 countries across Europe. EuCheMS provides a powerful single voice for chemists and the chemical sciences in Europe through its activities and development of policy. Website: http://www.euchems.org .
8. Overall are you satisfied with the Framework Programme and FP7 in particular?	Moderately dissatisfied