

Marie Curie Actions in FP7 – UK Comments on Commission Proposals

Introduction

The successful creation of the European Research Area will depend on Europe maintaining, retaining and increasing its supply of highly trained and innovative researchers. Indeed, it could be argued that Europe's main competitive edge in science and technology is the quality of its human resources. The Framework Programme Marie Curie Actions play a significant role in maintaining this position and in increasing the numbers of researchers in Europe, thereby contributing towards the Barcelona and Lisbon objectives. The Actions allow for the training and professional development of researchers of all levels of experience; providing them with a springboard for initiating and launching their research careers, facilitating networking and collaborative working between research groups across Europe, and providing a means for the European research base to be opened to researchers from the rest of the world.

The transfer of knowledge through people is a major element of the Framework Programme's means for raising Europe's research and innovation capabilities. In addition, the Marie Curie Actions are one of the most popular and valued parts of the Framework Programme for UK researchers. This was particularly clear from the outcomes of a consultation on the Framework Programmes the Office of Science and Technology conducted in summer 2004. Respondents to the consultation expressed almost universal support for the Marie Curie schemes, regarding them as good value for money. Almost all respondents viewed that the budget for the Programme should be increased. There was also little support for radical changes to the current range of Actions.

For all these reasons, we strongly support the continuation and enhancement of the mobility programmes in FP7 and in subsequent Framework Programmes. When considering the Marie Curie Actions in FP7, we view that these should focus on the following three main principles:

- The transfer of knowledge through people;
- Enhancing industrial research training; and
- Supporting and enhancing research careers.

The Commission has recently produced a series of papers providing an outline of their proposed views for the directions for the Marie Curie Programmes in FP7. The papers address the following five proposed Action lines:

- Marie Curie Networks for early stage researchers;

- Individual Marie Curie Fellowships for Life-Long Learning and Career Development: Co-Funding of National or International Research Programmes;
- The International Dimension of Marie Curie Actions;
- Realising the Potential of EU-25; and
- Industry-Academia Exchange Scheme.

We would like to thank the Commission for its openness in consulting at this early stage of the development of the Programme, and would like to contribute to the ongoing debate and respond to the ideas presented through the five papers listed above. This paper therefore presents our ideas on the initial directions set out by the Commission, as well as exploring how existing schemes could be developed further in alignment with our three main principles, and proposes new ways in which mobility funds could be used to good effect.

Commission Proposals

Marie Curie Networks (MCN)

Marie Curie Networks would strengthen and structure research training and skills development at a European level through networking and joint initiatives carried out by consortia of research teams. Marie Curie Networks would bring together the current Early Stage Training and Research Training Network schemes with a reinforced emphasis on research training.

We would support the principles of the Marie Curie Networks as they bring together two very successful Actions, with boundaries which have become blurred. The new Networks would therefore bring increased focus to the Marie Curie Programme and provide a simpler application route for researchers. The opportunities for Networks to organise training events which would be open to non-MCN researchers is particularly welcomed, as this would ensure that a greater range of researchers could have access to the training and skill-base offered by the Network.

There are, however, some areas of the proposal, as it currently stands, which we consider need revisiting. Whilst we support an increased emphasis on research training, the focus of the Networks appears to have shifted from the FP6 position of training through research, to one of structured research training. We view that the best research training takes place in research groups and organisations which carry out the best research. It is therefore important that the quality of the research unit(s) involved in the Network is paramount for receipt of funding for training the next generation of researchers through Marie Curie Networks.

The role of industry in the Networks is of concern. Three potential roles are set out in the Commission paper: as a partner (if relevant to the scientific subject area); as providers of

specific training only; or as representatives on the steering group. This assumes that all Networks will be academic based with the industrial partner participating mainly as an 'add-on'. This is not an acceptable situation given the clear policy drivers through Lisbon and Barcelona, which require a substantial increase in European industrial R&D.

It is apparent that some reworking of the current proposals is needed to ensure greater industrial involvement and participation. We consider that this could be carried out in two ways. Firstly, through dedicated calls for industry only, or industry-led, Networks to demonstrate the importance and necessity of research training in industry. The second way would be through extending the experience range of the researchers which can be recruited to MCNs to include postdoctoral researchers. This is currently the case for Research Training Networks in FP6 and would allow the scheme to meet the needs of industry more fully.

The MCN itself is a comprehensive package, offering a wide variety of options for research training. However, the option for Networks to be able to recruit Chairs does not appear to be aligned to the overall aims of Networks, nor to the need for research training to take place in a host with established research excellence. We consider that the opportunity to fund Marie Curie Chairs would be better placed elsewhere in the Programme. This is discussed further in the final section of this paper.

In the paper on Marie Curie Networks, the Commission has provided details of the indicative range of numbers of partners that can be involved in a Network. We have reservations about including guidelines on this level of detail, as it assumes a certain definition of critical mass that may not be relevant in certain areas, especially in new and emerging social science and humanities areas. Indeed, in some cases, it may be that only one research unit needs to be involved, however, this must always be the role of the Network itself to define.

We welcome the emphasis given to 'internal coherence in terms of quality standards' as well as the 'mutual recognition of training and diplomas'. Both of these issues will be of increasing importance as PhD training is accepted into the third cycle of the Bologna process. It is therefore important that there is dialogue with the policy leaders in higher and vocational training to inform such developments in MCNs.

Individual Marie Curie Fellowships for Life-Long Learning and Career Development: Co-Funding of National or International Research Programmes

The Marie Curie Individual Fellowships are the most well known, high profile and established part of the Framework Programme. Indeed, they are viewed by many researchers to be the Flagship scheme in the Framework Programme. As stated in the Commission paper, this appreciation can be particularly attributed to the bottom-up nature and individual approach of the Programme which allows researchers to find tailor-made solutions to their research, training and career development needs. Furthermore, as the Programme is operated through a single call, open to all areas of research, it provides assurance that the best researchers at European level carrying out research of the highest

quality are the ones which receive the funding. Indeed, a Marie Curie Individual Research Fellowship carries a quality mark widely recognised by researchers, research groups and research organisations in both the public and private sectors. It is these features which make the Programme unique.

The Commission paper sets out an ambitious proposal for replacing the Individual Fellowship Programme with a scheme for ‘topping-up’ Fellowship Programmes at national and international levels. The changes would be introduced gradually over the lifetime of FP7. The paper sets out the Commission view that these changes are timely as Individual Fellowships have reached a stage of maturity in Europe, and that such changes would reduce the significant administration burden of managing the Programme.

We have some serious concerns and reservations about the proposed changes and how they could work in practice. Whilst we recognise the Commission argument that such a scheme may assist in fostering change in national programmes, the European added value of the proposed scheme is not clear. We view that a key criterion for determining the appropriateness of EU spending is ‘added value’. For EU spending to be justified there has to be tangible added value in giving the competence to the supranational level. This added value is clear in the existing Individual Fellowship Programmes, which offer a unique mechanism for selecting and funding the best researchers through a single competition, open to all disciplines at European level. This would not be the case in co-funding national programmes. We consider that the proposed changes for FP7 do not provide sufficient European added value to justify such a fundamental change to the Programme and bring the Flagship Individual Fellowship Programme to an end.

The changes also appear to run contrary to the way in which research funding and Fellowship Programmes are developing across Europe. The clear added value of a single funding programme to select the best researchers and/or research is now widely recognised, not only through the Commission ERA-NET Programme and the current move to establish a European Research Council, but also in European-level Fellowship Programmes, such as those run by ESF and EMBO, and more recently the EURYI Fellowship Programme established by Research Councils across Europe. Such central mechanisms facilitate the evaluation of the impact and quality of Programmes at European level; factors which would be far more difficult, if not impossible, to assess through co-funding of a variety of diverse national programmes. Researchers selected to be Marie Curie Fellows through the current Programme have an immediate quality mark, which would be significantly diminished, for no apparent equivalent alternative, by co-funding national programmes.

The current Individual Fellowship Programme allows Fellows to choose to carry out their research in any research organisation in the public or private sector. This is a particularly valued aspect of the Programme and makes it quite distinct from the vast majority of Fellowship Programmes currently operating at national and international level, which fund researchers to work in universities and public research laboratories only. We are seriously concerned that the proposed arrangements would in effect exclude all industrial and many other non-public sector organisations from participating in Individual Fellowships. This would be a very retrograde step given the importance which we in the

UK and others attach to ensuring improved industry participation in the whole range of Marie Curie schemes as a part of advancing the Lisbon and Barcelona agendas. This in turn would clearly be contradictory to the cross-cutting objective of increasing industrial participation in the Marie Curie Actions, and in the Framework Programme in general' objectives strongly aligned with the key policy drivers of Lisbon and Barcelona.

Finally, we would question whether the current European research landscape is sufficiently prepared to take on such a fundamental change in the approach to funding Individual Fellowships. The options proposed for the co-financing arrangements assume a degree of harmonisation of Fellowship Programmes across Europe, particularly with respect to timetables for calls and funding decisions, which does not currently exist and could not be realistically achieved in time for FP7, even with a phased introduction of the co-funding scheme. We view that such issues need to be addressed prior to the consideration of any introduction of co-funding arrangement, otherwise we risk the disruption of many existing national Fellowship Programmes. This could be achieved by carrying out an 'ERA-NET' style initiative, drawing together the funding agencies and other organisations across Europe which offer Fellowship Programmes. The 'ERA-NET' could examine the fundamental underlying issues such as call timetables and procedures, as well as allowing funding agencies to share best practice on programme objectives, evaluation procedures, eligibility criteria and working conditions – the principal drivers for the co-funding arrangements. Such dialogue could serve to reduce the fragmentation in European Fellowship Programmes and prove effective in delivering the desired changes.

We recognise that the current arrangements for managing the Individual Fellowship Programme are particularly administratively burdensome for the Commission. We therefore welcome the suggestion in the Commission Communication of the 16th of June 2004 'Science and Technology, the Keys to Europe's Future', that consideration should be given to the outsourcing of the operation of the Programme in a way that reduced the administrative burden, but respected the nature and objectives of the Programme. We view that the co-funding arrangements do not represent the type of outsourcing envisaged in the Communication and indeed could prove as complicated to operate, administer, manage and evaluate as the current procedures. A better alternative would appear to be to continue with the current arrangements for the Programme in the short- to medium-term, and to consider the formal outsourcing of the operation of the Programme to an external organisation. An ideal candidate would appear to be the European Research Council, once it has been established, fully operational and demonstrated its effectiveness and efficiency in selecting and managing bottom-up research projects of high scientific excellence,

The International Dimension of Marie Curie Actions

In the paper on the international dimension of the Marie Curie Actions, a series of schemes for opening the European Research Area to researchers from the rest of the world are presented. In general, these follow on from successful Actions in FP6, with some minor modifications in certain cases. We broadly support the proposals presented.

We particularly welcome the proposals to build on the current Science and Technology Agreements that exist between the EU and Third Countries by, for example, offering exchanges and opportunities to hold conferences and workshops. This could be usefully supplemented by also building on the experience Member States have with their own bilateral Science and Technology Agreements.

We note the plans to ultimately move the implementation of Incoming and Outgoing Marie Curie Fellowships to a scheme of co-funding national programmes. In common with our views on the Intra-European Fellowships, we consider that such co-funding arrangements do not represent an ideal solution for funding European-level Fellowships, for the reasons set out in the previous section of this paper. Indeed, as there are a relatively small number of existing European Programmes offering Fellowships for Third Country researchers, or Fellowships which can be taken up in Third Countries, we consider the maintenance of a central call for proposals covering all disciplines and all countries, for both these Actions, to be essential.

Realising the Full Potential of EU-25

The Commission paper for this area of the Marie Curie Programme provides a comprehensive package of measures to encourage the mobilisation of human resources in the convergence regions of the EU. It provides opportunities for secondments, recruitment, twinning and equipment support as well as workshops and conferences. We welcome the proposals which amalgamate the FP6 Transfer of Knowledge Development Scheme and Return and Re-Integration measures, as well as the FP5 Centres of Excellence. We would, however, like to see further information on how this scheme will be aligned with the Structural Funds, to ensure that there is not any overlap and also to ensure that Framework Programme funding is best directed to ensuring the realisation of the full research potential of the European Union.

Expanding the Marie Curie Industry Dimension

The low level of participation of industry in the Marie Curie Actions has been of particular concern in FP6. Many companies have found the schemes over-complicated and/or not sufficiently targeted to their needs and requirements. This situation needs to be urgently addressed. We therefore particularly welcome the specific paper produced by the Commission on 'Expanding the Marie Curie Industry Dimension'.

The sole action envisaged in the Commission paper is an enhanced version of the FP6 Industry-Academia Partnership Scheme. This scheme was not popular with industry particularly, as noted in the annex to the paper, with SMEs. Whilst intersectoral transfer of knowledge is clearly of importance and the modified scheme would appear to offer some advantages over its FP6 counterpart, this Action should not be the only industry-orientated support mechanism for the FP7 Marie Curie Actions. Indeed, to ensure participation by both large enterprises and SMEs, there is a need for the Marie Curie

Actions to include an industry-led and industry focussed scheme, such as a scheme targeted at industry hosts. The popular FP6 Transfer of Knowledge Development Scheme which, under the current Commission proposals, would only be available in convergence regions, could be opened up to industry hosts throughout Europe and/or the FP5 Industry Host scheme could be re-introduced. Through these means, industrial interest and participation in the Marie Curie Programmes would be increased.

Excellence Actions

We view that the five Actions proposed by the Commission would, with the modifications outlined above, deliver an effective Marie Curie Programme fully addressing the first two of our three main principles for the Programme. However, we view that the Programme would be enhanced by the introduction of a sixth Action – Marie Curie Excellence Actions – to address more completely the third of our main principles; that of supporting and enhancing research careers.

In FP6, the Marie Curie Programmes offered opportunities for researchers at all stages of their careers, including a limited number of opportunities for Marie Curie Excellence Teams and Chairs. These two schemes played a valuable role in the Marie Curie portfolio of Actions, complementing the other opportunities available. The Excellence Teams allowed researchers to establish a research group and launch an independent research career at an early stage in their professional development. Marie Curie Chairs supported senior researchers to take up, or resume, their research careers in a new organisation, often on their return to Europe. We note the absence of these two schemes in the proposals for FP7. We understand that their absence may be linked to the proposed introduction of the European Research Council. However, there is currently no indication that the European Research Council would offer funding mechanisms analogous to either of these Actions. We therefore consider that both Excellence Teams and Chairs should form part of the funding opportunities available in FP7, under a Marie Curie Excellence Actions scheme. We would, however, prefer Marie Curie Chairs to be renamed Marie Curie Senior Research Fellowships, to demonstrate more fully that these Actions can be taken up by researchers working in industry as well as those in academia. In addition, as discussed earlier, we view that funding ‘Chairs’ or Senior Researchers, through an Excellence Action scheme would allow for a more coherent portfolio of Actions than the current proposals, which would allow Marie Curie Networks to recruit and fund appointments to Chairs.

Finally, there is a new scheme, which we would like to propose, which we believe would complement the current portfolio of Actions and would support the excellence Agenda of the European Research Area. The scheme – Marie Curie Researcher Conferences – would fall under an Excellence Action line.

Marie Curie Researchers Conferences

The Marie Curie Programme has a long tradition of providing funding for the co-financing of the development of conferences and the provision of bursaries for

researchers. We view that such Actions are best funded elsewhere and agree with the Commission that these should no longer form part of the Marie Curie Actions.

However, we believe that the Commission should fund a small series of conferences to bring together the Fellows which have been funded under the Individual Fellowship Actions. These Fellows have been selected on the basis of their excellent research potential, however, there are currently no opportunities for these researchers to meet, let alone network and collaborate, which we consider to be a missing opportunity. Such conferences would allow researchers to present current and future research ideas and results, network, and develop collaborative links with other Marie Curie researchers and potentially establish the European research networks of the future. The conferences should also be open to other researchers from academia and industry to further networking opportunities and the transfer of knowledge.

A potential model for these conferences could be the format used by the American Chemical Society conferences. Central to these conferences is a scientific programme, often focussed on inter-disciplinary, or new or emerging research ideas, with a series of parallel sessions to provide networking opportunities, liaison with industrialists, and training and careers guidance.

These conferences would address all three of our main principles for the FP7 Marie Curie Programme: the transfer of knowledge through people; enhancing industrial research training; and supporting and enhancing research careers. They would also serve to create a more coherent network of Marie Curie researchers, fostering a true European research identity and further develop the collaborative working of the future generation of European researchers.