ProTon Europe – 17 May 2011

Online questionnaire for the Green Paper on a common strategic framework for EU research and innovation funding.

This European Commission **Green Paper** proposes major changes to EU research and innovation funding to make participation easier, increase scientific and economic impact and provide better value for money. The questions are the same as those set out in the Green Paper. To facilitate responding, you are asked to rate the relative importance of the aspects covered in each of the questions. Text responses are limited to 1500 characters. If you wish to provide detailed written comments you are encouraged to use the written response submission form.

Information about the respondent

- I am answering as: A European Knowledge Transfer Association
- Country of location : An EU level organisation located in Belgium
- My organisations' main activity is: promoting European Innovation by increasing the effectiveness of knowledge transfer from Public Research Organisations.
- The name of my organisation is: ProTon Europe aisbl
- My organisation has received funding from FP6 and other European programmes.
- Have you or do you intend to submit a separate written response to this consultation? [No]

Working together to deliver on Europe 2020

The questions in this section correspond to Section 4.1 of the Green Paper.

1. How should the Common Strategic Framework make EU research and innovation funding more attractive and easy to access for participants? What is needed in addition to a single entry point with common IT tools, a one stop shop for support, a streamlined set of funding instruments covering the full innovation chain and further steps towards administrative simplification?

The Commission needs to adopt a more strategic approach to research and innovation funding through schemes and programmes such as the Framework Programmes, the Competitiveness and Innovation Framework Programme (CIP) and Cohesion and Structural Funds if the goals of Europe 2020 are to be achieved. **There is a need for a coherent set of instruments and procedures with more consistency of rules to cover all elements of the innovation cycle from training to research to development and commercialisation.** This is of equal or greater importance than the issue of ensuring that there is a common online point of entry with user-friendly IT tools. Other changes in programme management should also be introduced to facilitate participation including increased use of "two step" calls.

There has been a degree of progress in reducing the bureaucracy associated with Framework Programme 7 and this needs to be built upon and extended. **Increasing the engagement of the private sector, and particular SMEs, including new ventures needs to be a priority for future research and innovation activities.** We suggest that opportunities should be created for such companies to participate in projects with minimal administrative burden. Light-touch financial audit requirements may be appropriate where direct financial support to companies is limited (e.g. where the majority of funding is directed to university R&D providers who are meeting the technical requirements of companies).

More effective communications tools should be introduced to increase awareness of specific funding measures and tools among new entrants. In order to maximise the use of effective administrative systems it is important to facilitate exchange of best practice across the system. The participation of university partners would be greatly supported if the IT tools adopted by the Commission for the CSF required formal submission of proposals by authorised individuals in university management /administration. The current systems in place for Framework Programme 7 are deeply flawed in this respect. Universities are often left with too little time to evaluate and negotiate research contracts. (The Je-S system used by the UK Research Councils is an example of good practice that the Commission should study).

How important are the aspects covered in this question? - Very important

2 How should EU funding best cover the full innovation cycle from research to market uptake?

ProTon Europe welcomes the "The Innovation Union" published by the Commission in October 2010 as a Flagship Initiative of the 2020 Strategy. It recognizes that a sea change is required to achieve the Innovation Union and that Europe must move away from business as usual and make innovation its overarching policy objective. In effect it places innovation at the center of Europe's economic strategy. The success of this strategy requires innovation to be integrated into all areas of the CSF supporting research through all aspects of the innovation cycle from laboratory to market.

By combining actions in a "Common Strategic Framework" strong synergies of benefit for European research, education and innovation can be achieved. To further the contribution of European research towards the goals of Innovation Union it is important to combine actions underpinning and expanding the focus on research excellence. To this end and to support the long term sustainability and development of the European knowledge economy, the free space for curiosity and excellence driven research must be expanded; e.g. through the European Research Council. Interdisciplinary perspectives and approaches to research are critical for the promotion of innovation, particularly in tackling the growing societal challenges.

One way of supporting innovation is to ensure that the private sector engages fully with the programmes and that individual projects have appropriate plans for protection of intellectual property and mature commercial exploitation elements. While excellence in science is a key motivator, the successful development of long term strategic partnerships will only result from collaborative research that is mutually beneficial with an appropriate balance between industrial objectives and academic priorities. Funding under the Research Framework Programme should continue to focus on early stage research and should not aim to provide resources for any 'development gap' in order to take technologies to market. This is the domain of national funding agencies, the private sector and investment markets. However, the integration of much of the CIP with the Framework Programme, in particular CIP support for technology demonstration and pilot actions, should facilitate increased exploitation of research output and increase the complementarity of the CIP and Framework programmes.

A realistic exploitation plan should be an essential element in the evaluation of all project proposals. Depending on the proposal this could involve a range of outputs from the provision of training to the development of collaboration or strategic partnerships, or the generation of intellectual property to full commercialisation through the development of products and services, and the creation of opportunities for licensing to new venture formation. A percentage of the budget for each CSF instrument and project should be allocated for the exploitation plan. Another possibility would be to make provisions for researchers to apply for a supplementary grant for prototyping or other aspects of exploitation in cases where the output is particularly promising.

Research based education and doctoral training must continue to be central elements in the continual development of the European Research Area. Increased emphasis should be placed on placements of students in industry and on exchanges involving researchers and staff in both universities and industry. Achievements in innovation and knowledge transfer should be taken into account in university recruitment and promotion procedures. The focus on innovation and entrepreneurship and on enterprise participation is a particularly important contributor to the successful transfer of technology and the commercialization of university research output. If the innovation strategy is to be successful then CSF instruments should support the development of the skills of knowledge transfer professionals in all sectors of the economy. **Increasing the status and recognition of the knowledge transfer profession is also an important priority in the development of transnational innovation and mobility which is one of the objectives of the ERA.** A measure similar to Marie Curie should be introduced to facilitate the mobility of such professionals and the exchange of best practice across Europe.

Many inventions arising from CSF research will be immature. The development horizon is long, and the technological and commercial risks are high. For this reason private investors are often reluctant to invest in the commercialisation of such inventions. Without increased public funding many such inventions will not being exploited. **The Commission is urged to develop mechanisms to support seed capital and pre-seed capital to overcome the valley-of-death between research and market, thus enabling more research results to be commercialized.**

Many companies, especially SME's and new ventures, lack both time and financial resources to engage in multiannual innovative research projects. By establishing an Innovation Exchange with research results, companies can engage in the commercialization of projects without having to participate in the entire process from formulating new ideas to introducing products in the market. By reducing complexity of EU instruments and by combining public and private funding at this stage more research results could be commercialized for the benefit of the European knowledge economy.

How important are the aspects covered in this question? - Very important

3 What are the characteristics of EU funding that maximise the benefit of acting at the EU level? Should there be a strong emphasis on leveraging other sources of funding?

EU funding offers opportunities for research based universities across Europe to work together on areas of mutual interest with the most R&D focused companies. Uniquely, this provides international opportunities across the widest range of science areas. National funding agencies can only meet a small fraction of this requirement, if at all. It is becoming increasingly difficult for individual countries and individual researchers to achieve the critical mass of people, knowledge, infrastructure and skills to address the complex and interdisciplinary challenges which face them today. The ability to form consortia of strength and critical mass made up of the best international teams is essential where scientific, global grand challenges are to be addressed in an effective manner.

A proven ability to attract funding from national and other international sources is a key indicator of research strength and may be useful in assessment, e.g. indicating the sustainability of research

investment. However, **making EU funding contingent on securing other financial support would add an unwelcome layer of complexity** and may prove to discourage some entities from participating.

How important are the aspects covered in this question? - Very important

4 How should EU research and innovation funding be used to pool Member States' research and innovation resources? Should Joint Programming Initiatives between groups of Member States be supported?

In order to address Grand Challenges it is essential the JPIs continue to gain momentum across the EU. However, JPIs must supplement rather than replace other mechanisms. A degree of alignment is essential if national funding is to prepare the R&D community in any member state for full participation in European funded activities.

National funding for R&D and innovation does, however, need to retain independence and to support national priorities and research and industrial strengths. This acts to sustain the essential heterogeneity in the European research landscape and actually encourages international collaborations by providing for international complementarities.

JPIs, as recent developments, may need more opportunity to mature before decisions can be made on determining the most appropriate scale of support. The EU should not exclude funding of the areas under the JPIs in the CSFRI as this would exclude some member states and run contrary to cohesion goals. The role played by the Commission in JPIs should be maintained, particularly in co-ordination and ensuring transparency.

How important are the aspects covered in this question? - Very important

5 What should be the balance between smaller, targeted projects and larger, strategic ones?

Resources need to be made available at European level to support very large scale projects which may have great impact. **There is an important role for EU funding to provide resources for high risk, adventurous research and pilot projects which individual public and private sector bodies may be unwilling to fund.** However it must be recognised that such projects often face difficulties in management, administration and co-ordination.

It should also be recognised that smaller consortia may be more nimble and effective provided essential expertise is involved. They also promote greater competition between researchers and encourage a more bottom up approach.

Clearly it is best to achieve a balance between large and small consortia with both of these being part of the Commission's research & innovation portfolio. The larger consortia should not replace the traditional small and medium sized projects currently funded by the Commission.

The two stage application procedure is welcome particularly for SMEs.

How important are the aspects covered in this question? Very Important

6 How could the Commission ensure the balance between a unique set of rules allowing for radical simplification and the necessity to keep a certain degree of flexibility

and diversity to achieve objectives of different instruments, and respond to the needs of different beneficiaries, in particular SMEs?

We do not necessarily see a conflict between establishing a single set of rules and retaining a degree of flexibility. Once the new instruments are defined, the major aim should be to develop clear and stable rules explaining how they have to be managed.

Nor should this legislate against the involvement of a broad range of entities, including SMEs and new ventures. It is essential to ensure that new measures on simplification do not lead to the exclusion of SMEs or institutions with low levels of funding. It is appropriate that financial regulations and audit requirements might differ for e.g. a public body with a turnover of €500M which is engaged in 30 separate EU funded projects and an SME with a turnover of €300K which is involved as a partner in a single activity. **Reducing the administrative burden for small companies would be of considerable benefit in encouraging their greater involvement in the CSF.** This might be facilitated by consideration of how such an approach might comply with State Aid regulations.

The use of flat rates (according to the last modifications in Annex II of the grant agreement set up by the Commission) could contribute to increased simplification. At the same time, a combination of payment modalities might be convenient, for instance combining payment against delivery with goals achieved.

There is a need to involve SMEs in consultation on these issues.

How important are the aspects covered in this question? Very important

7. What should be the measures of success for EU research and innovation funding? Which performance indicators could be used?

Project outcomes will be varied in nature. As a minimum, the best scientific teams should publish their findings in high impact scientific journals and should also make them available to the public domain in other ways. **Broader measures of the impacts of research also need to be incorporated**, and narratives which describe (and quantify) how outcomes have been protected and commercialised are helpful, along with their effects on turnover and economic growth (e.g. new products, profitability).

Broader metrics which address the positive effects of research findings on policy, quality of life, IP generation and commercialisation and the impact on economic development are also necessary. Metrics included in the exploitation plans should be realistic, taking account of the time required to take the outputs of research to market.

An important feature of metrics is the need for continuity and this should be taken into account in the development of performance indicators.

How important are the aspects covered in this question? - Very important

8. How should EU research and innovation funding relate to regional and national funding? How should this funding complement funds from the future Cohesion policy, designed to help the less developed regions of the EU, and the rural development funds?

The response to Question 4 is also relevant here. Research and innovation funding should be awarded to the strongest possible R&D teams on the basis of the excellence of researchers and their proposals.

There is a strong case for ensuring that more of the funding is made available for support of less developed regions. **Structural Funds and rural development funds should support the commercial exploitation of results and intellectual property developed under Framework Programme projects**. A benefit of this may be that these projects become more international in nature and could then draw in broader and stronger interdisciplinary research teams.

However, a well defined framework is required when trying to link European and national funding. The Commission should not transfer European funding to be managed by national governments, most of the time this only contribute to make management more complex. National/regional funding could be linked to the approval and funding from the Commission. New and clear programmes need to be developed, in order to avoid duplications, incoherencies and complexity.

How important are the aspects covered in this question? - Very important

Tackling Societal Challenges

The questions in this section correspond to Section 4.2 of the Green Paper.

9. How should a stronger focus on societal challenges affect the balance between curiosity-driven research and agenda-driven activities?

A Grand Challenge approach is important is building large, interdisciplinary teams and, usually, long-lasting and sustainable partnerships. **Such an approach is essential as this may represent a high risk activity which the private sector is often reluctant to support.** Such programmes are generally top down and agenda drive. Care should be taken to ensure that the European research agenda from 2014 is not too aligned to societal challenges since this may impact on its flexibility to react to new challenges.

The thematic technology push, which characterises current EU programmes, should offer possibilities for policy-driven research and innovation activities. An appropriate balance between these bottom-up programmes and the JPIs should be maintained so that Europe has the flexibility to react to new challenges.

Scientific progress on grand challenges requires medium to long term perspectives and engagement of financial instruments supporting basic research and collaboration with enterprise and other parties. Furthermore the process of identifying these grand challenges must be transparent and uniform in order to avoid the selection and implementation of these grand challenges by strong private interests.

According to premise of the Lund Declaration and to respond effectively to the challenges facing Europe, the European Research Area must develop processes for the identification of grand challenges with political legitimacy and support and gradually move from the present thematic approaches towards a structure, whereby research priorities are based on these grand challenges. The answer to grand challenges should be in the form of broad areas of subject oriented research in relevant fields with an interdisciplinary approach giving all research fields the opportunity to play an even part.

How important are the aspects covered in this question? Very important

10. Should there be more room for bottom-up activities?

There needs to be scope to fund new ideas, the importance of which could not have been anticipated at the time when programmes were established. To an extent the European Research Council has established this as a successful stream of FP7 activity and this needs to be protected and its funding enhanced.

There also needs to be opportunities to fund activities which do not easily conform to established themes as frontier research in certain areas of interest when these fall outside of the ERC's remit. This should be addressed in collaboration with local and national interests. The bottom up activities funded by the EU require a broad spectrum of PhD graduates and researchers and allow member states, smaller institutions and SMEs to participate in Collaborative research across Europe and to build capacity in a range of areas important to Europe.

How important are the aspects covered in this question? - Very important

11. How should EU research and innovation funding best support policy-making and forward-looking activities?

A major objective of European research is to support the development of policy on research and innovation. Directed or commissioned research may be funded by the Commission where it sees a particular gap in its knowledge base as required to inform policy development and decisions. More broadly, forward-looking activities such as the foresight exercises undertaken by Member States would be facilitated by harnessing the enormous skills base and capabilities of those researchers participating in Framework Programmes.

ProTon Europe, which was funded by DG Enterprise, has an important role to play in policy development. With knowledge transfer (KT) associations from ten member states represented on its Board it is well placed to advise the Commission on KT policy. **There is a need to increase the status and recognition of the KT profession to enhance its role in providing advice on KT policy at national level.**

More interaction between policy makers and different administrations should be encouraged including through the organisation of focus groups.

How important are the aspects covered in this question? - Very important

12. How should the role of the Commission's Joint Research Centre be improved in supporting policy-making and forward-looking activities?

The raison d'être of the joint research centre is to support the Commission's policy decisions. Some Member States argue that the **JRC should also be available to develop joint programmes with Member States and to advise Member States where appropriate.**

There is also an important balance to be struck by the Commission between its degree of reliance on policy support from the JRC and making best use of the broader capabilities available across Europe.

How important are the aspects covered in this question? - Very important

13. How could EU research and innovation activities attract greater interest and involvement of citizens and civil society?

Some National Agencies place great emphasis on the dissemination of results. Dissemination of research results and public understanding of science are regarded as hugely important. Science Foundation Ireland for example required that a percentage of funding for the collaborative research centres (Centres for Science, Engineering and Technology) is used to fund outreach and education activities. However, this activity is under-resourced by national funding agencies.

In many countries scientists work in difficult conditions and are underpaid. Also, increasingly science funding is under pressure when national budgets are in a challenging position hence **it is important for science and innovation funders to support actions which inform the public about the benefits arising from research.** Indeed, it is important for science funders to themselves promote these benefits at a national level (within member states in the case of the Commission) and, in so doing, to raise their own profiles in a positive manner.

How important are the aspects covered in this question? - Very important

Strengthening competitiveness

The questions in this section correspond to Section 4.3 of the Green Paper.

14. How should EU funding best take account of the broad nature of innovation, including non-technological innovation, eco-innovation and social innovation?

The convergence of the Framework Programme, CIP and Structural Funds would provide support across the innovation cycle from research to technology demonstration and pilot actions. The EU would have to adopt different approaches to the structuring, funding and management of such programmes given the increased emphasis on demand and the need to monitor the achievement of deliverables included in the exploitation plan.

The key to successfully accommodating the broad range of actors which contribute to the innovation process is to ensure that there is scope for them to engage with research & innovation programmes by simplifying structures and modes of access. Thematic programmes of work should be scoped in order to encourage a diversity of approaches, from the technological to more sociological and/or community based offerings while maintaining a high level of rigour in the allocation of funding and determination of project monitoring targets.

How important are the aspects covered in this question? - Very important

15. How should industrial participation in EU research and innovation programmes be strengthened? How should Joint Technology Initiatives (such as those launched in the current Framework Programmes) or different forms of 'public private partnership' be supported? What should be the role of European Technology Platforms?

A major objective of EU research and innovation programmes should be the generation of long-term strategic partnerships between universities and business. EU programmes must become dynamic and less bureaucratic if they are to be attractive to enterprises. There must be potential for industry to benefit from EU research through new innovative ideas, patents, or access to new infrastructure or expertise.

While excellence in science is a key motivator for collaborative projects, if these partnerships are to endure and grow they must be mutually beneficial with an appropriate balance between industrial objectives and academic priorities. **Research and innovation funding should create an**

environment where all parties feel able to invest the funds, expertise and other resources needed to build the mutual understanding, relationships and trust required to facilitate the meaningful exchange of innovative ideas and intellectual property.

For universities collaborative research must provide technical and scientific challenges. **While the generation of income for the university from the resulting IP is important, it should not be the main objective of collaboration and the expectations regarding such income need to be carefully managed**. While recognising that the university should benefit from any major windfall, metrics included in exploitation plans should place greater emphasis on levels of exploitation by industrial partners and the potential value of the research in generating economic, societal and cultural benefits.

The Commission needs to engage directly with industry – from multi-national entities to regional SMEs – in determining programme content which is relevant and which will be supported. This is vital in the current economic climate where R&D budgets are under great pressure. Similarly, financial mechanisms need to be standardised and simplified if they are not to act as disincentives.

ETPs are a useful stakeholder route for determining joint research priorities, and JTIs are about delivery. This has been a positive development. However, openness and transparency and less involvement of big companies in decision making is essential to ensure optimum performance and involvement of SMEs in JTIs. It is vitally important to avoid ETPs becoming closed shops. **The Commission needs to ensure that smaller and less well resourced elements of the private sector are able to engage with these mechanisms.** If not, there is a risk that those who are involved with these structures may be very significantly advantaged to the detriment of others.

Expertise, relationships and trust are essential for successful collaboration. **Funding to support transnational mobility of researchers and technology transfer professionals between universities, companies and across sectors should be recognised as a priority.** More uniform conditions are required to facilitate mobility of these workers across Europe.

In addition, a common set of clear rules must be issued in order to motivate the industrial participation

How important are the aspects covered in this question? - Very important

16. How and what types of Small and Medium-sized Enterprises (SME) should be supported at EU level; how should complement national and regional level schemes? What kind of measures should be taken to decisively facilitate the participation of SMEs in EU research and innovation programmes?

It would seem to be a very difficult task for the Commission to pre-determine what types of SME should be supported at EU level. In terms of research and innovation this is currently restricted to those companies which have the capacity and vision to engage with and co-invest in programmes with external partners, and which have the ability and resources to commercially exploit project results.

However, very small companies that represent the majority of companies in Member States need to have more opportunities to participate in EU research and innovation programmes. Such companies, particularly those spinning out from university research are very knowledge intensive and innovative. Previous responses regarding streamlining and simplification of regulations and financial procedures are also vitally important in terms of greater SME and particularly small company involvement. **Targeted funding for exploitation, particularly cross border activity and two-stage proposals are particularly relevant in this regard.**

The Commission's support for these activities is of importance as national measures will inevitably target those sectors which individual member states wish to encourage and grow (hence they will be complementary).

How important are the aspects covered in this question? Very important

17 How should open, light and fast implementation schemes (e.g. building on the current FET actions and CIP eco-innovation market replication projects) be designed to allow flexible exploration and commercialisation of novel ideas, in particular by SMEs?

These schemes play an important role in supporting activities in a responsive and timely manner where opportunities arise. They should retain an appropriate degree of flexibility in their structure and funding model in order to accommodate innovative methods of both delivery and financing. The aim should be to facilitate the protection and commercialisation of innovative ideas and IP arising from EU funded research. **Greater emphasis should be placed on reducing the cost and complexity of patenting for SMEs (and universities) in Europe.** A separate funding stream should be available to cover the cost of exploitation for projects funded under EU instruments.

How important are the aspects covered in this question? - Very important

18. How should EU-level financial instruments (equity and debt based) be used more extensively?

Industry needs to be better informed of the details of the facilities available. A Risk Sharing mechanism focused on SMEs should be introduced. Greater availability of high risk seed funding or loan facilities could facilitate the successful implementation of exploitation plans.

How important are the aspects covered in this question? - Very important

19. Should new approaches to supporting research and innovation be introduced, in particular through public procurement, including through rules on pre-commercial procurement, and/or inducement prizes?

We see that there is a role for innovative public procurement in encouraging (enhancing) largely private sector R&D activities in responding to tenders. However, this should not be viewed as any form of replacement for conventional research & innovation funding as it generally involves the development of solutions which are already close to market.

The public procurement budget across Member States and the EU is very significant and could make a major contribution to close to market research and innovation. **Care should be taken to ensure that the rules for accessing such funding are not even more complex than traditional funding programmes, thereby increasing the barriers to SME participation.** Increased transparency must be seen as a priority.

How important are the aspects covered in this question? - Very important

20. How should intellectual property rules governing EU funding strike the right balance between competitiveness aspects and the need for access to and dissemination of scientific results?

Current intellectual property rules are not generally viewed as a disincentive to engagement with EU funded activities. Standard contracts, particularly the DESCA model are acceptable to all and the learning curve involved in the development of a new approach would not be justified.

The current rules provide for appropriate ownership of, and access rights to, project results. This facilitates commercial exploitation and allows for appropriate and equitable sharing of rewards. The rules also allow academic researchers to negotiate terms which provide for them to publish and further disseminate outcomes into the public domain.

Industry and universities should recognise that patenting, if the time frame is appropriately managed, is not in conflict with open access or publication. The timeframe for publication depends on the industry sector involved. In general patenting is important in Life Sciences while time to market is critical for ICT. However, at an early stage, issues such as university recognition of commercial activity in recruitment and promotion procedures, the motivation of the industry partner, the importance of IP for attraction of investment in start-ups, the possible need to re-file patents, etc should to taken into account when considering the agreed publication strategy.

The failure over four decades to reach agreement on an EU Patent and the costly and complex system currently in place is a significant obstacles to effective knowledge transfer from public research institutions to the economic system. For years ProTon Europe has been recommending the adoption of a unitary EU Patent with appropriate linguistic regime and unified system of dispute resolution in order to support European inventors, to promote knowledge transfer from public research to industry and to encourage collaborations. We note that because of the failure of the Member States to reach agreement on the language issue, a number of countries have proposed to establish enhanced cooperation between themselves in the area of creation of unitary patent protection.

How important are the aspects covered in this question? - Very important

Strengthening Europe's science base and the European Research Area

The questions in this section correspond to Section 4.4 of the Green Paper.

21 How should the role of the European Research Council be strengthened in supporting world class excellence?

We view the European Research Council as a significant success story. The popularity and oversubscription of its funding schemes is testament to its growing reputation, resulting in extremely low success rates even among the highest calibre researchers. The breadth of activities supported by the ERC is also to be welcomed. Its processes for prioritisation of funding are respected by the research community. Excellence should continue to be the guiding principle.

How important are the aspects covered in this question? Very important

22 How should EU support assist Member States in building up excellence?

This can be addressed through both Cohesion policy – based on the need to develop excellence and build capacity – and research and innovation policy which rewards excellence.

Clearly there is need to arrive at an overall balance of capabilities across the EU while accepting that individual nations will want to develop their strengths for strategic economic reasons. This

will result in a different type of dialogue with the Commission depending on where an individual member state finds itself along the spectrum of R&D capacity and growth.

While the benefits of combining resources and developing partnerships between different interests across Europe are clear, specific areas of excellence will also be developed in different Member States or regions.

Framework programmes encourage scientist from Member States to compete on excellence. Consideration should be given to launching a co-financed programmes (EU-national government) similar to IDEAS but at national and regional level. Increased mobility mechanisms for researchers should be provided. The experience in COFUND (People Programme) could be used.

How important are the aspects covered in this question? - Very important

23. How should the role of Marie Curie Actions be strengthened in promoting researcher mobility and developing attractive careers?

Marie Curie Actions are very well regarded and should be developed. However, we feel that the **programme should be simplified and the number of schemes reduced,** e.g. there could be a single mobility fellowship scheme (instead of separate European and international ones), allowing more flexibility.

Better co-ordination of national and European legislation is essential. A review of the level of the country co-efficient for the salaries of MC fellows would also be welcomed to avoid the current situation where MC Fellows are often paid significantly more than, and employed on different terms and conditions to, other members of staff at the same institutions. This is highly inequitable.

Support for mobility of researchers, including industry placements is increasingly important. Funding should be extended to support structured PhD education and training programmes involving entrepreneurship and commercialisation training. Such PhD graduates can play an important role in the generation of new ventures.

A measure similar to Marie Curie should be introduced to provide support for mobility of technology transfer professionals. This would play a significant role in promoting transnational innovation and mobility as required for completion of the ERA.

How important are the aspects covered in this question? - Very important

24. What actions should be taken at EU level to further strengthen the role of women in science and innovation?

Many successful women argue that they wish to compete under the same conditions as men and that excellence will strengthen their role in science. **However innovative action is required to provide for female researchers who have taken career breaks to have children or for other unavoidable reasons and who are clearly at a disadvantage (in comparison with both male and female colleagues) when they return to the labour market.** This disadvantage is not only financial but also in relation to other factors such as the reduction in publications and citations.

The problem is that when women do not compete in fair conditions at national level it is more difficult to develop their research career.

Programmes such as the Marie Curie Actions could be reviewed in order to assess whether any groups of researchers are disadvantaged by current regulations, e.g. those who may have significant family commitments, dependents, etc.

How important are the aspects covered in this question? - Very important

25. How should research infrastructures (including EU-wide e-Infrastructures) be supported at EU level?

The issue of research infrastructures has assumed a high degree of importance in the current economic climate. **Increased European support for participating in and access to infrastructure by researchers and SMEs should be regarded as a priority.** Cohesion policy and structural funds should be used to support the establishment of distributed pan European infrastructure.

A high degree of international cooperation is essential in the planning process (and we acknowledge that ESFRI has played a key role here) and it is vital that the EU facilitates this process and provides appropriate resources and co-funding in situations i) where projects involve member states; and ii) where there are potential co-investments to be considered with external non-EU partners.

Industry and SMEs should have access to EU funded infrastructure and associated facilities and equipment. The EU should consider introducing a new programme to maximise the use of infrastructure that it has supported.

In order to promote technology transfer and innovation **consideration should be given to the provision of funding and related support for the development of technology transfer offices within such infrastructure.** Such support should be committed for the medium to long term in keeping with the long lead time that is often required for successful commercialisation.

How important are the aspects covered in this question? - Very important

26. How should international cooperation with non-EU countries be supported e.g. in terms of priority areas of strategic interest, instruments, reciprocity (including on IPR aspects) or cooperation with Member States?

The CSFRI should have a global dimension, as the strongest science often involves global partnerships and the largest private sector firms are international by nature. The adoption of a coherent approach across Europe involving both member states and the Commission will help to build on the significant initiatives that have been introduced in recent years. International cooperation programmes within Framework Programmes are traditionally difficult to access and complex to manage. Therefore, it is also important that non-EU countries should transparently co-fund activities and that there should be a clear reason for their participation. Programmes should be governed by clear and simple rules.

There are some concerns over the potential for dual evaluation ('double jeopardy') in the implementation of 'twinning' calls which rely on other countries also evaluating proposals.

I**PR arrangements should be equitable, clearly, but may be more complex in order to account for differences in intellectual property law in collaborating countries.**

How important are the aspects covered in this question? - Very important

27 Which key issues and obstacles concerning the ERA should EU funding instruments seek to overcome, and which should be addressed by other (e.g. legislative) measures?

The European Union must provide the legislative framework to complete the ERA. It is essential to ensure that the ESF and future EU funding mechanisms are consistent with the achievement of the ERA objectives.

How important are the aspects covered in this question? - Very important

Closing questions

Are there any other ideas of comments which you believe are important for future EU research and innovation funding and are not covered in the Green Paper?

There are many barriers to the successful exploitation of the results of EU funded research. Some examples of KT and TT related barriers include:

- **Lack of consistency in the objectives of research funding bodies** in relation to innovation and technology transfer and failure to accept/understand issues relating to the important role played by the universities in the generation of IP and its transfer to the market place.

- **Need to develop long term strategic partnership between industry and universities**. Need for greater understanding of the objectives and priorities of partners involved in collaborative research. Lack of clarity in State Aid rules.

- **Need to increase the status and recognition of the knowledge transfer** profession and to increase the attractiveness of knowledge transfer as a career for highly qualified graduates. The knowledge and technology transfer profession needs to be developed in industry as well as universities.

- In some Member States knowledge transfer professionals have **little opportunity to contribute to policy development** at national level.

- **Need for medium to long term commitment to funding of Knowledge Transfer Offices** in some Member States and need to manage expectations in relation to generation of income by university from the commercialisation of research-generated intellectual property

- **Shortage of early stage seed funding for campus companies**. Need to increase the size of VC funds to ensure that VCs have the capacity to continue to invest in knowledge intensive ventures past the first round of investment.

- **Need to reduce the cost and complexity of the European Patent System and to harmonise the intellectual property systems across Europe.**

Note on ProTon Europe.

Background

Proton Europe was established in 2003 with support from DG Enterprise. Its aim is to promote innovation in Europe by increasing the effectiveness of knowledge transfer and cooperation between public research organizations (PROs) and the industry and business community. Since 2007 ProTon Europe has been operating as a self financing not for profit association. ProTon Europe is now an influential voice for the Knowledge Transfer profession in Europe.

1. Largest Europe-wide PRO KT network

ProTon Europe is unique in that it comprises representatives of 10 national KT associations/networks (including AURIL, CURIE, NetVal, RedOTRI, etc). Through these associations/networks ProTon Europe reaches out to KT offices in over 600 universities and other PROs throughout Europe. ProTon Europe is also working in partnership with other KT organizations such as TII, IKT, LES, EPO, EUA, EIRMA, EARTO, EPO, etc

2. Voice for the profession on European KT policy

Proton Europe is a valuable source of policy advice for the European Commission. Because of the strength of its network it is recognized by the Commission as being ideally placed to represent the views of the KT profession across Europe. Current issues include the establishment of the Innovation Union, professionalization and resourcing of KT, reducing the cost and complexity of the European patent system, IP issues in FP8, building strategic partnerships, support for knowledge intensive ventures, etc. Some examples of European initiatives where ProTon was asked to provide advice are listed in the footnote below.

3. Comprehensive data for benchmarking performance

In 2010 the ProTon Europe annual KT survey included data for over 320 KTOs including comprehensive coverage from UK, France, Italy, Spain, Denmark, Ireland and France. This is over 3 times the coverage of the other European KT surveys. Comprehensive data for at least two additional countries will be included in the 2011 survey. ProTon Europe is committed to expanding its coverage to ensure the availability of the data required by national and European policy makers.

4. Increasing recognition of the KT profession

With the support of the European Commission, ProTon Europe is working with other KT associations, policy bodies and training providers to establish EuKTS. The aim of EuKTS is to increase the recognition for the KT profession by providing Europe-wide accreditation for training providers and certification for individuals at various stages in their careers as KT professionals. The basic level accreditation and certification will be launched later this year.

5. Building and strengthening networks/associations

A major objective of ProTon Europe is to assist KTOs in building and strengthening national networks drawing on the experience and expertise of established national networks. Supports for network/association development include:

- One Board meeting per year is hosted by a national network. Time is set aside to discuss issues relating to the hosting network. KTOs from other countries interested in establishing national networks are invited to participate. In 2010 the meeting was hosted by the Danish network and the president of the Swedish network also participated.
- Training programmes for networks are arranged on request
- CPD courses including hot topic debates and workshops are generally co-branded with national associations or other KT organisations

6. Networking/Communications

The main networking event of ProTon Europe is the Annual Conference which is hosted by a national association. The 2010/11 conference was held in Lisbon and organized by a consortium led by Instituto Pedro Nunes in Coimbra. The 2011 Conference, which will take place in Rome on 28-30 September, will be organized jointly with NetVal. ProTon Board Members also welcome opportunities to participate in conferences and other events organized by national KT associations.

The ProTon website has been updated as a valuable communications tool for members and their associations.

Examples of EC POLICY initiatives in which ProTon Europe has been involved:

- European Research Area - Expert Group on Knowledge Sharing
- European Institute of Technology IP policy
- Responsible Partnering - guidelines for strategic partnerships with industry
- State Aid Rules - guidelines on State Aid for R&D and Technology Transfer
- European Patent System - reducing the cost and complexity of patenting in Europe
- Monitoring and Analysis of Technology Transfer and Intellectual Property Regimes
- European survey of KTOs and participation in Survey and Metrics Group
- Management of IP and publication of associated Code of Practice
- Establishment of EuKTS to provide accreditation of KT training providers and manage the certification of KT professionals in Europe
- Consultation on Innovation Union