

NEM – The European Network Electronic Media Technology Platform

Response to the:

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: [individual, government body, university/ higher education, commercial organisation (less than 250 employees), commercial organisation (more than 250 employees), association, other (please specify)]

Association

- Country of location [Austria, Belgium...etc., EU level organisation]

EU level organisation

- My/ my organisations' main activity is [research, higher education, manufacturing, services, public administration, other (please specify)]

European Technology Platform

- The name of my organisation is [free text (optional)]

NEM, Network Electronic Media European Technology Platform

- I/ my organisation has received funding from: [FP7, CIP, other EC programme (please specify), research/innovation support programme in my country]

FP7 CSA

- Have you or do you intend to submit a separate written response to this consultation? [yes, no]

NO

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Response to the:

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

Overall Summary:

The European Commission issued a Green Paper on February the 9th 2011, with the aim to launch a Public debate for the future of the European research and innovation funding programmes and instruments, such as FP7, CIP and EIT, Public Private Partnerships (PPP), Joint Technology Initiatives (JIT).

NEM ETP membership includes representatives from academia, large industry, and SMEs. It would be unreasonable to expect all respondents to be in agreement at all times, and there are some understandable differences of view between industrialists, SMEs and academics, however the following summary is a good reflection of the common view of the NEM constituency.

In summary, the responses to the green paper cover a number of key concerns and observations by a wide constituency of respondents representative of the members of the NEM ETP. Core to these issues are the issues of the level of bureaucracy inherent in the EC framework process, and its effect on the involvement of SMEs in collaborative projects. ETPs have a powerful role to play in the amelioration of some of these challenges, and these too are highlighted. There is a need for the EC to reduce bureaucracy, and to recognise that more flexibility is necessary to allow for the inclusion of SMEs in projects. SMEs are seen as the engine of innovation and disruption; more effective risk-sharing mechanisms are needed to enable SMEs to take products and services to market more quickly, including perhaps the reduction of loan thresholds from the EIB. Public procurement policy can also help in this regard, by providing a route for support of the development of high-quality technology in framework programmes, and recognising the role of research organisations and SMEs in providing innovative solutions.

The relationship between projects at the European level and at local national level should be developed. Whilst agenda-driven research is more important at European level than curiosity driven research, the timescales at European level can be very long, and regional programmes generally exhibit faster, more flexible response, suggesting that stronger links should be maintained in order to collaborate more effectively, although this should not lead to either an increase in local bureaucracy or a diminution of the financial structures of the EC.

The need to maintain and develop IPR for exploitation whilst allowing for standardisation and open publication is recognised as an important but complex area. Projects should be encouraged and judged on their impact rather than documentary output, but in order for that impact to be translated into commercial success they need to retain control of IPR. This is especially important in the context of international collaboration with regions outside Europe, which is seen as very important, and is strongly supported by ETPs such as NEM, but does have to be seen as reciprocal in knowledge exchange terms in order to extract the greatest value.

Given the importance of SMEs and their relationship with larger industry, particularly in the design and creative organisations, the ETPs should be seen as having a catalysing role to play.

It is recommended that, in addition to their networking, advisory and strategic research role, ETPs should play a consultative role to the EC, and facilitate innovation partnerships both within ETP topic areas and through cross-ETP initiatives, taking a stronger role in the formation and assessment of collaborative R&D proposals. It has been identified that there is a need to create more effective dissemination channels for European research, and ETPs have a leading role to play here, since they connect researchers, policy makers and implementers, being particularly active and effective in linking together University and industrial activity.

The future EC research and innovation framework programmes should clearly focus on strategic priorities, and be implemented through funding instruments that foster a better balance between a control, trust and risk-taking systems. Funding innovation intrinsically implies a risk-taking attitude for all stakeholders (public and private ones). SMEs and the large companies should be involved in the definition of the research priorities and respective budgets, so that the technological development is based on the real ambition to transform the results of research into tangible business opportunities.

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?

Respondents to this question represented large companies, public corporations, SMEs and academia. There was general agreement that the current structure of R&D funding is good overall, and the thematic areas are well considered and should remain as they are. There was also strong agreement on the need for a reduction in bureaucracy in the establishment and administration of framework projects. The process of project management needs to be significantly more flexible and responsive to the changing technical environment. All respondents are agreed that a reduction in complexity is necessary to allow greater participation from SMEs, with some calls for funding levels to be increased for small organisations. There was also the opinion expressed that the current system of loan guarantees prevents SMEs and entrepreneurs, who are the power house of change, from becoming as involved as they could given direct funding. There is some conflict of opinion regarding the role of large industry in the framework development and project implementation process, with some respondents pointing out that large industry has a vested interest in maintenance of the status quo, apparently encouraged by the FP, whilst small enterprises are the source of innovation and disruption. This is countered by the view that large industries should be more involved in determining the direction of the programme. There is some agreement that the bidding process is specialist and biased towards professional proposal writers rather than focused on the recognition of innovative ideas and groups. A final area of strong agreement is on the need for the programme to support the entire value chain, from research through development and demonstration to market deployment, with a generous VC support programme in place to enable the bridging of the gap to full

commercial deployment, but with closer and more flexible monitoring and development of projects throughout this lifecycle.

All respondents considered this question to be **Very Important**

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

There was significant agreement on this topic, although with different emphasis from different constituencies. It was felt that a reduction in bureaucracy would greatly help, especially if it was part of a process of reforming the overall management of the project lifecycle, with encouragement being given to projects that meet their objectives at each stage, whilst projects which fail to reach their objectives for whatever reason should be terminated. A peer review process was proposed to evaluate projects. Great emphasis was placed on facilitating innovation at the start of the cycle. Design and creative organisations were seen as important at this stage, as were the involvement of not-for-profit organisations that facilitate and support social innovation. The point was made that innovation is not necessarily technological, and a more user driven approach to innovation should be introduced. The catalysing opportunities inherent in ETPs (such as NEM) should be recognised. This is contributory to broadening the ecosystem of players and innovation catalysts involved in the project lifecycle. Links between basic research, R&D, Innovation, testing and trials and market-focused projects should be encouraged, as should the use of testbeds and living labs to test innovations in large scale experiments across the European citizen base.

It was seen as important to avoid funding gaps in some of the project cycle stages, and one approach would be to build in incentives to good performers in projects to encourage them to move to the next stage, whilst also providing better access to finance. This would be assisted by an investment in education to improve entrepreneurial skills as well as supporting business executive to help them understand business model innovation.

It was highlighted that fundamental research should not be neglected, neither should the social aspects of innovation. Some resources should be assigned to short-term projects able to respond rapidly to emerging market opportunities.

Overall respondents saw this question as **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?

It is felt generally that joint funding initiatives offer the best leverage of national and central European funding, although there is a need to provide compatibility between EU funding and national funding schemes. This is particularly important where there is a need for re-submission at local level and in local language of a project that has already been submitted at European level. It was also noted that some regional funding schemes provide less than 50% funding for industrial partners, but that this is a disincentive for involvement which should be avoided at EC level.

A counter-argument was put forward which points out that leveraging of other funding sources to support an EC bid leads to additional administrative burden. This is particularly significant for the involvement of SMEs, who do not have the resources to invest in building partnerships on a European level, and thus find European collaboration very inefficient. An SME focused programme is proposed that responds to the demands and new drivers of the digital age whilst avoiding the overhead of building up traditional partnerships geared to winning projects rather than delivering results.

Notwithstanding this, there is agreement that breadth of access to researchers and industry across Europe is beneficial and that there should be connections between European and regional funding, allowing local projects to expand to European level, and results to be delivered back to the regions, since it is clear that individual countries do not have the capacity to do what is done more effectively at the European level. EU funding provides the opportunity for wider networking, exploitation of commonalities and complementarities, effective division of work between partners and access to a wider market for results.

On average, respondents felt this question was **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?

There is a general feeling that Joint Programming Initiatives should be supported, however there are a number of concerns with what this would mean in practice. A common observation is that such initiatives should not add an extra bureaucratic level, and should not lead to the imposition of lower funding rates at regional level. This concern is based on the fact that European and National schemes tend to address different aspects of the innovation cycle, since member states are able to promote research based on different criteria and on local experience. There is also the concern that timescales are important, especially in digital content driven industries such as games, and JTIs lead to long delays between the initial research idea and the start of a project to develop it. In such rapidly changing markets this can lead to projects being funded which have little or no market potential.

One view is that, since research is essentially a random process, risks need to be spread whilst maintaining competition, which is more easily done with regional programmes, however, synergies between European, trans-national and national projects need to be improved and results of all projects should be more visible at an EU level.

Overall the respondents felt that this question was **important**.

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

Opinion is very much divided on this question, although the distinction between large strategic projects and smaller targeted projects is well understood. Some respondents feel that a 50/50 balance between each is correct, but other proposals range from 70/30 small to large on one hand, to 30/70 and even 100% small targeted projects from other respondents. The point was also made that the question of ratio of project types was the wrong question to be asking, and that projects should be determined by impact rather than size. It is recognised that these two types of project target different parts of the innovation cycle, and so there are likely to be many more smaller targeted projects than strategic projects, although the ratio of funding may well be more equitable. The point has been made that large IPs are too large and inflexible, and are SME hostile, leading to a suggestion that only small budget STREPS with 50% SME quotas should be permitted.

A consensus seems to be that the instruments should be more flexible, allowing the creation of sufficient critical mass to make a significant impact, whilst permitting the formation of consortia best suited to deliver results. To avoid fragmentation of the funding process, duplication between calls should be avoided and there should be greater interaction between projects.

On balance, respondents felt that this question was **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?

It is generally accepted that the current composition rules for consortia are sufficient, but incentives for increased SME participation could be offered. For example, the administrative burden could be reduced, and different rules allowed for SMEs and large industrial partners under the same instrument. Levels of reporting could also be reduced to that which is necessary, and no more. In particular the interpretation of rules by Project Officers should be normalised, such that the rules imposed are only those necessary to run projects and are not excessively onerous. There is a need to reduce the complexity of programmes at all stages in the process. This should include streamlining of application and approval processes and more flexibility in cost accounting and reporting, based on achievement of milestones rather than meeting fixed dates. Reduced time to payment after submission of reports would also help SMEs

There is a split in the recommendation of composition of projects which will support SMEs, with one view stating that large organisations are largely irrelevant to the innovation agenda, and that SMEs, being goal based rather than process based, are the only drivers of innovation. The other view suggests that more industry drive is necessary, since it is industry that ensures that products reach market. This highlights the need for flexibility rather than any unresolvable difference between participants.

This question was generally seen as being **very important**.

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

It was agreed that key performance indicators could be found for measuring the success of R&I funding, but that different indicators are necessary for research projects than for those closer to market. This is because research success is not measurable at the end of a project, but often years later, and so needs to be addressed from a wider viewpoint. Nonetheless, any indicators used should be those arising from, or identified by, each individual project. Generic indicators are not seen as adding any value, and simply add another unnecessary layer of reporting. To this end, success measures should be results oriented rather than documentation oriented, possibly based on a business plan, although it was also suggested that there needs to be a way of quantifying the impact of innovation beyond sales and market share, perhaps related to social impact, although it is not clear how this would be achieved. Some specific suggestions made include indicators based on scientific and exploitation results, time to market, resultant cash-flow, level of user acceptance and applicability in solving societal challenges.

This question was generally seen as either **important or 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?

Central funding should recognise disparities in availability of national levels of funding, since more developed EU members have higher opportunities for attracting R&D funding than less developed ones, even though they have equally valuable R&D potential. This could include offering higher funding levels, up to 100%, for less developed regions. It is noted, however, that the capacity of recipient countries to draw on structural funds for R&D purposes should

be improved, since every European organisation should have equal access to funding. This is currently made difficult for SMEs and countries in Eastern Europe because of the complexity of the instruments. The suggestion has been made that proposals including partners from Eastern Europe should be awarded an additional point in evaluation. It was also observed that centralised funding is necessary for long term investment in more speculative research, whilst shorter term research and innovation, particularly in dynamic markets, is better financed at national or regional level.

This question was variously rated as **very important or important**.

Section Summary comments – although the respondents are varied in the respect of their constituencies and their view of the role of large industry, they are all agreed that the bureaucracy and complexity of FP projects must be reduced, and that greater emphasis should be placed on the entrepreneurial companies able to create disruptive change. EC should recognise the different roles and operational models of SMEs, industrials and academics, and should ensure that the programme is structured to allow them all to make a contribution to techno-economic development in Europe in collaboration, rather than competition, with each other and the Commission.

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?

Answers cover a large spectrum, from those underlining the necessity to focus on curiosity-driven, technology-driven or demand-driven research to those calling for a more demand-driven research.

Key highlights from members include:

Curiosity driven R&D may be used for identifying new potential areas while agenda-driven ones explores well-defined areas.

The research should always be demand-driven, with companies as demand providers.

Curiosity driven research grows out of a need perceived by the researcher, which will often relate to a societal challenge in any event.

What is important is to ensure that technological-driven research remains strong. Without it we weaken Europe's future in key global industry sectors including ICT, Energy and Health. The balance should be for more technology-driven research with focus on solutions that work across sectors.

Many technologies have to be developed before their applications to societal challenges. Research can however be addressed through an "agenda-driven" approach, provided that that this agenda is not prepared only to meet the current political concern of the period.

Of course a balance is needed but the present European situation calls for an agenda-driven activity. As indicated, funding has to be divided into more specific elements

A strong position of Europe in ICT and Internet technologies is a societal challenge in itself. Even though this challenges-discussion is useful, it should not undermine the competitiveness of European ICT, but enable it even more. Therefore it should be at lower priority.

“Curiosity-driven” research is necessary. It should also be “demand-driven”, based on socio-economic analyses. Now, at a time when ICT in general and the Internet in particular have an increasingly central role in our societies, research should logically be more and more “agenda-driven”.

A question considered as **very important**.

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

Answers covered a large spectrum. The term “bottom-up activities” has obviously different meanings for stakeholders having contributed to this part. Most answers however recommend that room should be given to bottom-up activities while some propose that EU-funded RTD might not be the right mechanism to do so.

Key highlights from members include:

Yes. It will offer better compliance to real-life problems.

Sure, but a "real" bottom-up it is not easy. It might be just "on paper" but however driven by lobbying and the European Commission

No, always demand-driven.

The overall chain (RTD + Exploitation) should be promoted. FP8 should not concentrate exclusively on the traditional first stage. The CIP programme should be empowered to contemplate aid on the innovation stages.

There should be a balance. I'm not convinced that there isn't room for bottom-up activities already.

Yes, as these often bring breakthroughs that agenda-driven and top-down activities might not bring since they tend to give more incremental improvements on larger more mature platforms.

Can't rather bottom-up approach (bottom-up proposals are very difficult to evaluate at European scale) be reserved to other (national or regional) instruments?

Significant effort has to be devoted to agenda-driven activities. We prefer top-down approach taking a significant proportion of the budget. However, a cohesive eco-system of innovation where large companies pull out of SME is of utmost importance to achieve a real RDI impact throughout EU.

Agenda-driven activities do not necessary lead to satisfying results: innovation is moving too quickly and is overtaking the agenda setting process. Therefore any undertaking to add new bottom up approaches to the research funding is welcomed.

Possibly, but it might be more relevant to see it take place at national and regional levels.

Yes, to suitably address societal challenges bottom-up activities are necessary. A stronger involvement of users, communities, representatives of the civil society, etc. should be

ensured. The potential for crowd-sourcing and community-based innovation should be explored.

A question considered on average as **important**.

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

Most respondents consider that more efforts should be done to increase links between EU research and innovation and policy-making / forward-looking activities, particularly through regular meetings. The role of FET and the necessity that the feedback of EU research is more systematically analysed, are underlined.

Key highlights from members include:

It is well addressed already. Forward-looking activities are well promoted through FET initiatives. Increase of the budget for FETs might be considered.

They should put in place a better communication approach.

As before, demand-driven proposals, with real people background, should be at the front of the policy-making tools.

There should be more connection between the on-going work of R&D projects and policy makers, perhaps through the mechanism of workshops/summits to a less technical political audience. Politicians rarely seem to look forward more than a few years ... i.e. not at all in this context.

Funding innovation should be an instrument to support overall European policy to solve major societal challenges (global warming, ageing, creation of jobs, combating the economic downturn). The most straightforward way of doing so will be closing the gap between R&D results and markets.

The results of EU-funded programmes, and the new perspectives they may open, should be more systematically brought to the attention of those involved in policy-making and forward-looking analyses, for instance through regular meetings.

This question is considered as **important**.

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

It is not sure that all respondents have a clear understanding of the activities of the various institutes of the JRC, and particularly of the one focusing on forward-looking activities (IPTS). Among answers and suggestions: a clearer definition of JRC positioning, their stronger involvement demand-driven proposals and projects, more continuity in their thematic approaches.

Key highlights from members include:

SA and CSA as already defined in FP7 with increased support for policy development and standards definition efforts.

Again with a better communication of results approach.

Applying their efforts in demand-driven projects and proposals.

Clearly the activities of Joint Research Centers have to be closer to the market and to enterprises. A more cohesive system has to be implemented in order to find the applicability of the results and research performed in the JRC.

The JRC activities should be strengthened and become more long term. In the game industry they have been producing a study in 2010; they have developed some expertise, but are not continuing this project in an update.

The answer to this question will probably be found by an internal debate between the European Commission and the European Commission's JRC... This being said, the role of JRC in general, and its participation in EU-funded projects, should be clarified since it is an instance linked to the European Commission.

This question is seen on average as **important**.

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

There is a consensus that greater interest of EU research and innovation should be developed from citizens and the civil society, even if some underline possible risks (focus on what is gloomy and not on what matters). Among suggested ways to attract these stakeholders: traditional media channels, social networks, increased and targeted project dissemination, ETPs and regional clusters, involvement of these stakeholders in projects.

Key highlights from members include:

Project funding should offer bigger support for involving general public though controlled, but FREE access to project results even some time after the project concludes.

We must communicate to citizens and society not just between us.

Developing attractive tools and mechanisms for communicating EU research activities, in different channels: television, the Internet, social networks, etc. This means assigning part of the EU research budget to marketing and promotion, as Americans do with cinema blockbusters.

More to the point, should it attract greater interest? There may be a role for a publicity machine, but that would tend to focus on the whizzy or glib developments, rather than the ones that really matter.

Through ETPs, regional clusters, organisations that link users, art and technology together, creative partnership initiatives, engaging citizens and the civil society (including by funding their involvement). Direct dialogue is also possible through social media and other targeted online initiatives.

Clearly a greater effort in dissemination to the general public has to be undertaken. Political support -beyond words- to projects and to specific results can also be significant.

To raise interest, more targeted activities should be developed to explain why EU research outputs are useful to citizens and the civil society, e.g. through TV programmes such as Futuris, more articles in newspapers. The WP should more often specifically call for their involvement, "impose" it as a selection criterion of proposals whenever relevant.

Overall, this question is seen as **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?

Respondents to this question represented large companies, public corporations and SMEs. **There was general agreement that broadening the nature of innovation to include non-technical, eco and social innovation is important.** More specifically:

EU funding should also address sociologic, usage and ergonomics and social innovation teams should be included in projects.

Funding a broader innovation ecosystem in an integrative approach, will allow for example technological innovation to be thought from the start in the context of social innovation, speeding up uptake and spill-over of results to more than one sectors.

There should be specific indicators to validate innovation in the proposal, along the different aspects of innovations including technological, ecological, social, marketing, financing, etc.

EU funding should also focus on the producers and users of knowledge, since the current focus on publications, patents and content copyright approach means that the impact on society and the environment are neglected.

Specifically for SMEs members see benefits from:

Simplification of procedures and administration, encouragement of direct SME involvement into projects and not through bigger entities, reaching out at major industry events where they are more likely to be present than in EC-based events and supporting them in applying through media desks and media antennas (eg. by the Media programme).

The CIP programme should be broadened in scope and EU programmes should allow and encourage smaller consortia, to test new ideas or at the startup phase of innovation, which is more appropriate and effective for early stage innovation, and later support the few promising ideas for rapid growth through bigger consortia.

Overall it is considered an **important** question for the contributing members.

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?

There was an unanimous response from the NEM contributing members and the industrial members in particularly, that role of ETPs has been key in the success of the ITC industrial sector in FP7 and that **ETP's role should be continued with increased funding and their activities strengthened** to go beyond lobbying and delivery of Strategic Research Agendas and position papers.

The ETPs should play a key consultant role to the European Commission for European strategic research including exploring tools (regulation and funds) in order to position future technologies which will make European citizens leading users of ICT worldwide.

The future role for ETP in CSF includes:

ETPs should be instrumental at facilitating the innovation partnerships of the future. The creation of a vibrant ecosystem of innovation among large companies, universities, SMEs, R&D centres should be pursued.

Cross ETP initiatives should be formalised and funded in the future, as they allow industry to deliver a combined vision on specific topics.

ETPs can be used to link to new sources of financing including structural funds, public procurement and developing leading edge markets on a European and then global scale.

On the operational side ETPs should have a consultant role for some project evaluation related to new and long-term vision. ETPs can act as technical and business validators for the proposals before they can be granted, to inform and disseminate CSF information and results, link to regional platforms and regional clusters, including testbeds, experimenting platforms and living labs for large scale trials.

ETP must also be a place where industrial projects are synchronized, and where pre-standardization is discussed.

JTIs on the other hand might be good instruments provided that

- The management is simple and straightforward.
- The industry has a strong voice in deciding the research priorities, allocation of resources and instruments.
- More effective commercialisation of research results is targeted

Overall this was considered a **Very Important** question.

16. How and what types of Small and Medium-sized Enterprises (SME) should be supported at EU level; how should this 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?

There is a unanimous view that **SMEs should be supported at EU level** and not only regional or national.

Overall NEM suggestions from already published position papers suggest that CSF should:

- Create research programmes suitable for SMEs and simplify participation rules and governance, including faster, simpler research funding procedures and support at national/regional/EU levels
- Stimulate and assist SMEs to participate in larger EU R&D cooperation initiatives such as European Technology platforms and public-private partnerships
- Take a wider view of SMEs, to identify cross-sector programmes and open innovation models across global value-chains
- Share best practice between researching and non-researching SMEs
- Provide risk-sharing financing and support to reach venture capital or business angel financing to take products and services quicker to market.

There are diverging views however, when it comes to how this support should be provided under CSF.

SME members believe that diverse levels of funding should be provided for all types of SMEs (micro, small, medium, etc) and that there should be a clear quota for SMEs in the CSF. Supporting micro-SMEs with higher levels of funding could offer opportunities for increased growth of start-up companies. Budget proposal should be based on future impact on the market more than in manpower force, as the current model is biased towards giving bigger budgets to only big companies.

Some bigger industrial members believe that SMEs should be involved in projects led by bigger players, while other bigger players believe that specific calls should be set up for short term research and that can give results in short time and be able to market asap, to support SMEs appropriately.

Overall, ETP are well accepted by SMEs, particularly at NEM, which has shown a special sensitivity to the promotion of SMEs. The NEM SME Activity could serve as an example of how to promote and check permanently the needs of SMEs regarding the strategic research priorities. There should be a clear quota for SME's in the programme and a maximum of 5 million EURO to be spent per project.

Overall this was considered a **Very Important** question for contributors.

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?

During recent years IPs and JTIs or similarly PPPs have become more and more popular. This also means that projects have become bigger and bigger. From the perspective of SMEs, this is a wrong direction. Especially in the area of ICT innovation is less and less coupled to leverage and the bigger the projects become the less focussed they are on new innovations.

If more support from the CSF would be successfully targeted to the needs of the most innovative SME's, it would direct the funding to the most successful European products, content and services which in the long run would increase the competitiveness of the whole Union.

In order to secure that funding goes to SME's and to enable higher quantity of projects, this kind of funding should be directed only to the projects of about 5million euro and one should be allowed to reapply more than once for the same project.

Furthermore, the CSF has to be much more risk-taking, risk tolerant and competent to identify the most innovative initiatives behind the formal quality of applications.

EU could create a program funding for preparing and evaluating real impact of proposals in the market, developing real business plans, before starting any development.

FETs need to have an opportunity for converging into classical RTD projects in case they show realistic technological potential. More dynamic consortium compositions should be allowed throughout the project time frame.

Finally, NEM members stress that research and innovation support should be better customised to the needs of innovative digital content and services.

Overall this was an **Very Important** questions for contributing members.

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

This was a question answered by a smaller number of members as members felt that elements of this have been covered in previous questions. Relevant to this questions is the view expressed by some SME members that the European Investment bank should not only hand out loans of higher amounts, but also smaller amounts below 20 Mio€. A possible scenario could be that the EIB is lowering the threshold to about 1 mio €. We do not support EIB providing guarantees or back up scenarios for banks. This makes banks richer not SME's.

Overall this was of **Some importance** to the contributing members.

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?

Our members were in agreement that public procurement and pre-commercial procurement are good mechanisms and the EU and member states should explore the use of public procurement for R&D and innovation as extensively used in the United States. Public sector entities and public procurement are a significant source of demand in the EU, that can thus drive the development and implementation of new technologies, including through public-private partnerships (PPPs). Public procurement should be the channel through which the public sector leads by example, ensuring that the highest standards and latest technologies are used in public projects. Furthermore, there is an important need to simplify the plethora of current instruments rather than introducing new ones, as part of the CSF. Hence, this type of public procurement should be funded separately from the future Framework Programme. The EC and Member states As the public procurement is a national responsibility, the EC should promote possible joint pre-commercial public procurement between member states to ensure a critical mass and acceptance.

At national level there is a need to:

- promote the entrepreneurial spirit
- improve technical skills of the population.
- enhance the relationships between universities and enterprises.
- eliminate the lack of appeal of research careers and
- unlock the talents of people and identify skill gaps and concerted actions to address them

Overall this was considered **Important** for our members.

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?

The contributing members to this question feel that IPR is a difficult problem, since at the end of a project, industry has the "obligation" to make money using the totality and part of the results. On the other hand EU funding should encourage open standards and creation whenever possible of open innovation and co-creation. However, It is somewhat utopian to

consider that all fruit of research is free and open and final decision should be left to the consortia and individual partners in a framework so that they able to return results for funding received.

We believe that the increased market-orientation of the future Framework Programme will require a review of Intellectual Property Rights (IPR) provisions governing the collaborative research. In general, IPR provisions in the contract with the funding authority should remain flexible, should be neutral and not endorse the preferred options of one or another group of participants in the Framework Programme, and aim to ensure predictability, as otherwise industry will certainly re-consider its contribution to some projects.

On the other hand IP rights have been reinforced over the last decades and some are now unbalanced in favour of right owners, without any perceptible impact on innovation, in particular copyright. Patents are applied in a more reasonable way but they are still more favourable to large incumbents (especially because it is costly to have a patent all over the EU) than smaller innovators. Some members also believe that projects supported with public funds should have open dissemination of scientific results.

For global companies, the treatment of subsidiaries in third countries is an important issue. These subsidiaries should not be treated as third parties. Arrangements regarding IPR ownership and access rights should be subject to contractual freedom between the participating entities.

Overall NEM members consider this a **Very Important** question

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?

The ERC role is of great importance, it should become more visible and start to collaborate with any other programs. For instance, it could help in the export of European technologies through common research programs with other regions such as what has already been done with Brazil and Russia. It is crucial to help European industry to export their technologies outside Europe and collaborative projects with partners from other regions are one of the best ways to make it. In another hand, there is a need to avoid that ERC becomes a close – semi academic- institution. Care should be taken to foster a significant contact with the industry and the innovation world to assure researchers and results are transferred to industry and markets.

An **Important** question overall.

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

Nowadays, there are already many research programs in Europe, it is complex for the research community players as far as there is no a unique selection process. It is necessary to let Members state opening specific national calls but there is also a need to unify the proposal submission process as well as the project selection review process. One of the key points is to share a common research agenda able to answer to a common European vision. Any European or national call should have to refer to such a document in order to avoid overlaps and also gaps in the IT roadmaps. One of the possibilities should be a joint funding between member states and European Commission for calls addressing a common research

agenda using a harmonised selection process. By the way, there also should be a need to keep the existing selection procedure; selecting the best proposal regardless of the group proposing it, is the best way to promote excellence. If cohesion is needed on top, some additional instruments have to be put in place.

Contributing members think this is a question of **Some Importance**

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

It is obvious that exchange of researchers between universities is profitable to people in order to share experiences and competencies between European laboratories. In this regards, Marie Curie Actions is a very good tool to promote mobility and cross fertilization and there is a need to continue and strengthen it with appropriate funding for mobility for researchers and support for issues limiting mobility uptake (e.g. family-mobility). However, age limits should be relaxed offering access to these programs to larger group of potential candidates. In addition, it should also be profitable to develop such a tool with industry in order to develop more exchanges between universities, research centres and industry; it also should be a good point to develop attractive careers and to help students to find a job.

Overall this was ranked as an **important** question

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

Promotion of women participation in funded activities has never increase the involvement of women in RTD. Excellence in research is not particularly related to gender. Most R&D organisations in Europe are already well mixed and this aspect is not considered as high priority. However, It is well-known that IT research does not attract women, there is a need to make advertising in order to make known this sector and that should be part of the education sector. Promotion programs are required to increase the attractiveness of research to women irrespective of funded R&D activities. Calls aimed to address this specific problem (focussing on secondary and higher education) could be launched where high quality female candidates could be identified at the early stage of their carriers and for attracting them to continue their involvement in science.

Overall this question was ranked as **Important**.

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

There are already many projects offering infrastructure facilities to research projects (PanLab, FIRE, OneLab, GEANT, PlanetLab, ...) and it is confusing for people. There is a need to harmonise all these initiatives in one European Lab with a single point of entry and having several entry points (test beds in each European countries and obviously liaison with countries outside Europe). These labs should have 3 objectives : 1- offer technical test services in order to help projects to integrate the technologies and verify end to end performance, 2- offer usage test services in order to test uses cases in front of a panel of users, 3- update the infrastructure in order to offer the latest technologies. In order to extend this lab to other regions, it should be appropriated to launch CSA or SA projects in order to identify potential target areas/regions where European industry could have market interests.

Overall this was an **Important** question for the contributing members.

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?

International cooperation is mandatory as far as it is one efficient way to disseminate European technologies and to prepare market for European industries. However, the process should be based always on reciprocity. A clear European strategy for international cooperation should be defined, in order to maximize its effectiveness and impact of collaboration, including :

- identification of consistent strategic objectives
- harmonization of national programmes to support R&D efforts, make those national R&D programs more efficient by exploiting synergies
- Measurement of the effectiveness of the collaboration both in the short and long term.

Following aspects should also be taking into account:

- Potential new markets opened by the cooperation.
- Establishing win-win relationships
- Involvement of key players: private industry, public authorities, research institutes, academic community, financial community, civil society, users and consumers from Member States including New Member States and Associate Candidate Countries.
- Promotion of roadmaps for technological cooperation between European and other areas of the world.
- Alignment of strategic research agendas and work programs

In this regards, ETPs should help in that field as far as they are already establishing strong liaison with non European countries. It is key for the European industry to export their technologies and to compare their vision. It is also a mean to share priorities and to identify common interest in specific projects.

Overall this was ranked as an **Important** question.

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?

There are already many funding tools in Europe but sometimes too much complex. So, there is a need to simplify them and make them more accessible to SMEs which do not have experts bureau in cooperation projects. We all know that SMEs are key in the market development, a specific effort has to be done in order to make European Innovation more efficient. In this field, a specific effort should be made toward content producers which are a key sector if we look to what happen in US. (Facebook, Google, ...). There is also a need to set up a pro-innovation legal and regulatory framework (IPR, streamlined adoption of EU standards, pro-innovation state aid rules, consumer policy) in order to have a more comfortable research environment. There is also a need to make standardization more efficient in order to insure interoperability between solutions. For that last point, most of the research projects do not contribute to standardization as they should have to do simply because at the end of the project there is no more man power left to finalise the standard due to incompatible plannings.

This was a **Very Important** question for our members.

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?