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“GREEN PAPER - From Challenges to Opportunities: Towards a Common Strategic Framework for EU Research and Innovation Funding”  

Views of the University of Oslo  

The University of Oslo (UiO) has read the European Commission’s Green Paper with great interest. As a research institution and “stakeholder” we have a significant interest in the development of the future framework for research and innovation. Our comments will relate mainly to a desire for a broad innovation debate, excellence as a general principle for research and innovation, ongoing simplification and streamlining, common rules and a limited number of instruments within the framework. The UiO is pleased that there will be renewed focus through Grand Challenges, but also wishes Cooperation to continue with its thematic priorities, ERC and the mobility programme as fundamental pillars for research priorities having the greatest possible long-term perspective.

The University of Oslo is grateful for the opportunity to comment on the European Commission’s Green Paper on a future European research programme and is very pleased to have the opportunity to promote some of UiO’s points of view in this regard. The UiO wishes to highlight a few key issues which we believe are very important to the UiO’s and the higher education sector’s involvement in a future European research arena. A separate document regarding social science and humanities, prepared by our Faculty of Humanities, is enclosed.

At the same time, the UiO wishes to highlight the particular challenges for Norway as a country outside the European Union and it is also noted that the Green Paper refers solely to Member States as the participants in the main framework for research and innovation. The key principles behind the proposed Common Strategic Framework are concentration and prioritisation, complementarity with other EU instruments (such as Cohesion Funds/structural funds) and corresponding funding instruments. This means that there is a clear need for political clarification of the scope and content of Norway’s participation in the future cooperation, which will take place outside the framework programme we are already familiar with.
General discussion of the Green Paper’s concept of innovation and the knowledge triangle of research, education and innovation

Norway as an innovation country

- The EU’s Innovation Union Scoreboard provides useful information on what Norway is doing well and the areas in which we are experiencing difficulty. At the same time, there are some things that cannot be measured by traditional innovation indicators but which are important for Norway as an innovation country. These include working life organisation and the importance of knowledge-based and raw materials-based businesses. Norway cannot invest in everything, but has to prioritise its investments.

Innovation must be defined more accurately

- The concept of innovation is broad in the Green Paper, as it should be. The UiO wishes to strongly emphasise the central role of basic research in the innovation process. Innovation often comes through insight and inspiration from basic research. Innovation is more than just the result of strategic planning and commercialisable results and must embrace the concept of innovation such that it is discussed within social sciences and humanities on equal terms with the more traditional and perhaps narrow concept of innovation of other academic approaches.

- Innovation is not just about product development, but should also include social and human changes and progress that is of vital importance for the development of humanity. A purely instrumental approach to innovation ignores the fact that technological and product-oriented development do not operate in a vacuum, but are man-made phenomena that respond to the needs and challenges of different social cultures. It must also be stressed that the concept of innovation relates not only to the production of goods and the private sector, but also to the production of services, the public sector and smarter and more efficient management (health, education, environment, culture, etc.). This is of particular relevance to Norway and the other Nordic countries, which have a large public sector.

- As a university it is important to ensure the need for research with a long-term perspective. We believe that a greater focus on short-term results may undermine the research base at our institutions.
Balance between scientific excellence and innovation

- Innovation must be built on a platform of high-quality basic research. Underlying “scientific excellence” is at the heart of an efficient innovation system. Excellence, in terms of both academic research and industry-related research, development and demonstration, must be cutting edge for all research activities, throughout all projects and cooperation in the European research arena in both the public and private sectors.

- Europe’s research capacity is dependent on the broad scientific base which also underpins innovation capacity and entrepreneurship. The knowledge triangle consists of the three pillars of research, education and innovation. The ambition of the UiO is to be an international research university where excellent research forms the basis of and interacts with excellent research-based education at all levels – with innovation forming a natural part of the process. The education aspect must therefore be enhanced and given a central role in our understanding of the dynamics of innovation.

- An innovation system must not be so monolithic that there is a risk of missing out on exciting high-risk projects! “High Risk-High Gain” is not always consistent with the expectations of innovation. Columbus would never have rediscovered America if he had not had the opportunity to “shop around” with his ideas in a pluralistic Europe.

Innovation must be part of education – give students an entrepreneurial spirit

- The plans for an innovation union should be formulated so that education lies at its heart. An interest in innovation must be encouraged early on in a person’s studies and the task of innovation should play a major role in the education process.

- The UiO supports the European initiative for a “Business PhD”, with a focus on education and entrepreneurship. Business must be involved in defining the educational requirements and supporting the training of researchers. Norway and other Nordic countries have good experience in national “Business PhD” arrangements whereby companies and universities share the financing costs of training researchers. At the same time, it is essential that the quality and content of training for researchers continues to be defined by the research institution itself, although in close cooperation with industry and commerce. Complementarity must also be ensured between European level and existing national arrangements for the “Business PhD”.

Key messages from the University of Oslo

Working together to deliver on Europe 2020, including a common framework for all the EU’s research and innovation programmes, a streamlined set of funding instruments covering the full innovation chain and the relationship between national programmes and EU instruments, including funding from the EU for joint programmes (Joint Programming Initiatives) between groups of countries.

- Funding arrangements in a new common framework for research and innovation funding must move towards a common general framework rather than the current differentiated, detail-based approach.

Questions 1, 3 and 6

- The UiO acknowledges and supports the dedicated work of the Commission to simplify administration in all areas of the Framework Programme.

- The UiO wishes to stress the importance of the ongoing simplification process also being characterised by continuity, legitimacy and predictability. This will be essential to the success of the framework programme in the future.

- The UiO would particularly like to highlight the desire for greater acceptance in the framework programme for pursuing national accounting practices and more uniform rules for cost reimbursement. This will be the most important individual initiative for simplifying involvement in EU-funded research for participants at all levels.

- The UiO wishes to highlight the need for a standard interpretation and implementation of the framework for eligibility and financing across EU institutions and funding instruments. As the Interim Evaluation of FP7 shows, there is a problem with the large number of uncoordinated instruments. All instruments should be evaluated to ensure that there is no duplication or overlap and no new instruments should be introduced without examining the relationship to existing arrangements. More flexibility in the framework programme will give the participants greater freedom to manager their projects by establishing, structuring and continually adapting consortia. It should be easier, for instance, to involve new partners, including industry, during the project’s lifecycle in order to provide the best conditions for innovation.
A new common strategic framework for research and innovation funding must ensure a harmonised, transparent and effective framework for all funding arrangements, including border area activities, with particular focus on Joint Programming Initiatives (JPIs).

- The UiO wishes to stress the importance of transparency, clarity and greater coordination between the many new instruments of ERA, primarily Joint Programming Initiatives, but also Public-Private Partnerships (PPPs), European Industrial Initiatives (EEIs), Joint Technology Initiatives (JTIs), European Innovation Partnerships (EIPs), European Institute of Technology (EIT), etc.

- The UiO recognises the need to develop JPIs in order to prevent the fragmentation of research efforts and resources for major societal challenges and to create synergy and complementarity with other EU activities within research and innovation.

- As a strategic tool, the JPIs require strong leadership and strong commitment if they are to succeed – in the form of focused priorities, clear objectives, real commitment of resources and results-driven organisation and management. JPIs should focus on the major societal challenges, as defined by relevant participants in an open process, with the active and committed participation of the research community. We feel positive about the strategic focus that these platforms will open up in terms of the major societal challenges we are currently facing.

- The UiO is convinced that the research and societal challenges the world currently faces can only be overcome through interdisciplinary cooperation, in which social sciences and humanities naturally have a role to play. The definition of the so-called Grand Challenges should open up a wide range of academic disciplines and the particular subject area of SSH within Cooperation should be maintained and strengthened.

- The UiO wishes to note that both JPIs and the focus on Grand Challenges may result in the exclusion of smaller research units from competition, which will restrict European integration through the ERA.

- Alongside the more politically driven challenges, there should be scope for researchers at all levels to promote research into future, as yet unknown research areas. JPIs should comply with the framework conditions for participating in the framework programme in general and also be open to participation through open competition for both new and national participants.
“Joint Programming” must be developed as a complement and not a replacement to the “Cooperation” programme.

The introduction of the many new instruments and programmes, with a greater focus on innovation, commercial development and competitiveness, will also present particular challenges for the role of research institutions as “stakeholders”. This could mean that the role of research institutions and their ability and opportunity to influence priorities in the European research arena could be more difficult compared with previous framework programmes.

**Tackling societal challenges**, including the balance between “curiosity-driven” and “agenda-driven” research in order to tackle societal challenges and increase the involvement of citizens and civil society.

- The need to establish a balance between agenda-driven, result-oriented research (“top-down”) and open, researcher-initiated research (“bottom-up”) in a new common strategic framework for research and innovation funding

> The UiO believes that top-down research can be important in many contexts, but also wishes to emphasise that researcher-initiated research is an important factor in securing long-term capacity in the research community for meeting future unknown societal challenges. It is therefore important that a future framework programme ensures that there is room and funding available for open arenas, such as the European Research Council and Marie Curie Actions.

- A new common strategic framework for research and innovation funding must be organised in such a way that the programme strengthens intersectoral, interdisciplinary and international cooperation.

> The UiO wishes the main elements that currently form part of the “Cooperation” framework programme to continue. The organisation of this programme is an excellent means for establishing cooperation across both subject and sector boundaries and represents a particularly good starting point for cooperation between industry and academia. It is perhaps
particularly within this area of the framework programme that the Norwegian research community has built up considerable expertise and experience, which means that continuity and predictability are particularly important.

- A future strategic research programme should have broadly defined calls to a greater extent and should achieve a balance between “top-down” research topics and more openly defined calls of a “bottom-up” nature. One of the criticisms of the “Cooperation” programme has been that the calls are too narrow and too few, which has made it difficult for smaller institutions and environments with shorter time horizons to participate. Narrower calls mean less flexibility in terms of interdisciplinary projects and the opportunity for researchers to define their own projects.

*Strengthening Europe’s science base and the European Research Area (ERA),* including *strengthening the ERC, EU support for research infrastructures, initiatives in the EU programmes to complete the construction of the ERA by 2014 and priority areas for international cooperation.*

- **Researcher mobility and the training of researchers are of vital importance to establishing world-class European research environments.**

  - Question 23

    - General barriers to research mobility, both at national and international level, must be identified and dismantled.
    - A future framework programme should clearly enhance greater mobility as an integrated and flexible part of research cooperation.
    - The PEOPLE programme should be maintained as a still strong and subject-independent special programme for mobility in Europe.
    - Cooperation between academia and industry may be highly relevant and attractive within Marie Curie, as it actively contributes to stronger career paths across sectors.
    - ITNs are a very important tool for raising the level of researcher training to an international level. However, ITNs are characterised by key structural requirements for cooperation with industry and commercial partners, which has proven to be problematic to achieve in certain
environments, in particular social sciences and humanities. Consideration should be given to whether this requirement can be formulated in a more flexible manner in order to open it up to all research groups in a future mobility programme.

- A future framework programme should be open to pan-European research schools with high academic quality so that the best researchers and candidates can be recruited. Such constellations would be able to have academic breadth and depth to build up a good offering within researcher training, aimed at giving a greater interfaculty and interdisciplinary boost to address societal challenges, for example.

- In order to ensure the competitiveness and breakthroughs of European research, the need for excellence must continue to be the decisive factor for research funding in a new common strategic framework for research and innovation funding.

- The UiO believes that the European Research Council should continue and be strengthened, including in terms of its budget. The establishing of the ERC has been a boost to free basic research and excellence, where a more coordinated, transparent and harmonised system based on peer review has made it available and accessible to the research community. Excellent research paves the way for excellent results, inventions and innovations and forms the basis for defining and overcoming the societal challenges of tomorrow.

- The UiO observes with interest the proposals for new instruments that have been made in the context of the ERC, in the form of “Proof of Concept” and the “ERC Synergy Grant”. We will monitor these instruments closely in the future in order to assess how they can help to strengthen the ERC as an instrument and a framework for excellent research.

- Research infrastructures, Open Access and IPR

- The role played by universities in the research infrastructure is vital to the quality of research, academic breadth and therefore also the opportunities to develop innovative interdisciplinary research groups. The universities represent an infrastructure for bringing together senior
researchers, recruits and students in a unique manner that is vital to the continuous new
development of research.

- Universities are the main bearers of research infrastructures and should be strengthened in
  order to boost a variety of advanced and often unique infrastructures for research and higher
  education.

- The development of research infrastructures will be of great importance to Europe’s
  competitiveness, as well as to excellent pioneering research, and will require greater financial
  scope in a future framework for research and innovation. Sustainability must be ensured
  through joint financing mechanisms at national, European and international level. Future
  initiatives within the framework programme for excellent research infrastructures must be
  closely coordinated with the other participants and sources of funding and include
  construction, access and operation.

- New research infrastructures must be selected on the basis of The European Strategy Forum for
  Research Infrastructures (ESFRI).

- Given the significant variation in such infrastructures, universities are ideally placed to provide
  the optimum conditions for modern integrated approaches and to support the strengths and
  profiles of the institutions. Researchers must be given the opportunity to use these
  infrastructures in an effective, simple and standardised manner.

- International networks and the virtualisation of research infrastructures must be developed
  further. “Open Access” is becoming increasingly important in all disciplines and we support the
  idea of future EU programmes developing this principle further. The IPR rules must be made
  more accessible and standardised for all research programmes and project types.

- **International cooperation with non-EU countries**

  - The UiO actively supports the idea of the EU’s research programmes being open to researchers
    and research groups from all countries. If the EU is to improve quality and breakthroughs in
    research and innovation activity and help to overcome global challenges, it must intensify its
    cooperation with third countries and selected parties within selected areas through optimally
    adapted instruments. Cooperation with leading countries within science and technology as well
    as emerging economies is particularly important. Cooperation must be reciprocal in nature and
    must be to the benefit of both parties. The framework programme’s support for international
cooperation through the Capacities Special Programme should to a great extent focus on and support new partnerships in terms of strategic measures to achieve increased cooperation on research and innovation with third countries through the Strategic Forum for International S&T Cooperation (SFIC).
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Contribution from the Faculty of Humanities, University of Oslo

There are two particular challenges associated with the Green Paper from the point of view of the Faculty of Humanities:

1. The EU’s Green Paper has a view of innovation that is instrumental and too narrow. Innovation is not only about product development, but should also include social and human changes and progress that is of vital importance to the development of humanity. It must also be stressed that the concept of innovation relates not only to the production of goods and the private sector, but also to the production of services and the public sector (health, education, environment, culture, etc.) This is of particular relevance to Norway and the other Nordic countries, which have a very large public sector.

2. Saying only that innovation must also “embrace” social science and humanities (SSH) reduces these subjects to a passive role. It must also be stressed that SSH has traditionally had justification through the fact that its research makes an important contribution to social and human identity and self-understanding, while in its critical role it also questions conventional ideas and practices.

With regard to this, we would particularly like to highlight the following:

Social development and ethics
A broad interpretation, understanding and explanation of the cultural conditions required for social development is essential in order to deal with the specific local and global challenges our society currently faces. A purely instrumental approach to innovation ignores the fact that technological and product-oriented development do not operate in a vacuum, but are man-made phenomena that respond to the needs and challenges of different social cultures. The insight of the humanities into interpretation, formation of opinion and history is very important in terms of contextualising and so understanding and explaining such phenomena and for predicting their consequences.

There is a need for a more philosophical relationship with ethics and values. Particularly in a transcultural Europe it is important that social development (including industrial and commercial development) takes place in accordance with what is ethically justifiable. In this discussion, the expertise of humanities in terms of understanding language, communication and history is of considerable importance.

Language, communication and creativity
Recent globalisation and the opening up of the EU’s internal market to the free movement of goods and
services has placed considerably greater importance on the language skills of employees. We have relatively little knowledge, however, about how multilingual ability helps to strengthen knowledge-based economies and society. The same is true of how language skills are converted to human capital and contribute to intercultural awareness, skills and know-how in a global market (EC, 2009). The relationship between language skills, creativity and innovation requires further research (EC, 2009). We need to have knowledge of language and communication in themselves, the individual and social benefits of language skills, how language skills are managed and not least multidisciplinary approaches that combine the knowledge we already have in new and innovative ways. The differentiated language situation in Europe largely brings to the fore the relationship between the EU’s objectives, linguistic, cultural and social complexity and the role and importance of the nation state, including the importance of national languages.

The Green Paper needs to have a broader and better described concept of knowledge that also emphasises the knowledge we gain through the senses (aesthetics) and knowledge gained from practice, including that which cannot be converted immediately into new technology and/or saleable products. Creativity and fantasy (“imagination”) nowadays have equal recognition within the hard and soft sciences; creating the right conditions for growth for the unpredictable is often the difference between outstanding and pioneering research.

**Proposed Grand Challenges for SSH or where SSH can contribute:**

**Climate change**
An understanding of social structures and politics is required if we are to rise to this challenge. Natural science is able to explain why and how climate change takes place, but it is SSH that can tell us what we can do and which measures are most likely to be effective.

**Migration**
Migration will increase in the future as a result of globalisation processes, changes on labour markets, political conflicts and not least climate change. Europe needs to have more knowledge about the causes of migration, the construction of a multicultural society, integration, education and language development.

**Nation states under pressure:** Europe has seen a long period of intensive nation state-building, but now these nation states are under pressure as a result of globalisation and the increasing power of supranational collaborative processes (EU, UN, international treaties, international military interventions, economic globalisation). What is happening to the role of the nation state?

**SSH perspectives on ICT**
New technology and new media are changing social structures, communication methods, our tradition of reading and writing, even our concept of knowledge, and this in turn will affect technology development.
SSH can give us an insight into the changes that are taking place and the way in which they are happening, how technology development shapes social development (responsible innovation) and how we can make better use of technologies and new forms of communication in the public sector and in industry. This in turn can help to contribute to the development of new products and job creation.

**The relationship between innovation and outstanding research**

A greater focus on outstanding research is desirable (cf. interim evaluation of FP7). There is cause to examine whether the arenas for outstanding research can only be ERC and Marie Curie or whether other arenas should also be created with a similar priority.

There is no contradiction between good research and innovation; on the contrary, innovation emerges from research-based insight. That is why it is a positive step that the Green Paper stresses the importance of involving and including users in research processes at an early stage. Involving users does itself require a complex understanding of social and cultural contexts, which the humanities can provide.

**Strengthening SSH in Cooperation**

The results of the interim study *SSH Commentary* show that SSH acts as a platform for the internationalisation of humanities and social science research, that it offers attractive topics for humanities and social science researchers and that it provides good opportunities for multidisciplinary work. We share the opinion of the report that there should be a considerable increase in the SSH budget; the practice of financing only one project per subject does not ensure a breadth of complementary results. We consider the report’s recommendations to better integrate humanities perspectives in research topics in SSH and to increase the opportunities for research into humanities-related subjects to be extremely important. We also consider the recommendation that research topics must be openly formulated to be very important; the balance between bottom-up and top-down research must be improved. Small and medium-sized projects should still be advertised.

Sincerely yours

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