Consultation on the Green Paper

"*Towards a Common Strategic Framework for EU research and innovation funding*"

a written response by Fondation Sciences Citoyennes

Paris, May 19 2011

INTRODUCTION

Recent European policy documents place science and technology at the heart of the evolution of European societies. They underlie the importance of research and innovation for the creation of jobs and for "green growth". But Europe 2020 and the Innovation Union Flagship Initiative place R&I almost exclusively under the prism of competitiveness, business, market, high technology development and industry interests to the detriment of wider public and civil society interests, the development of common goods and adapted solutions for the societal and ecological challenges Europe (and the world) are facing. Addressing adequately poverty, social, economic and ecological injustice, loss of biodiversity, climate change, resource scarcity, the need to move towards a low-carbon society, public health issues, democratic deficits, etc. would need a significant shift of current European R&I policies away from competitiveness and corporate influence towards more democratic processes and a review of the prioritisation of R&I activities.

Fondation Sciences Citoyennes is concerned by the EC Green Paper on the Common Strategic Framework for research and innovation funding. Whereas high competitiveness and economic strength seem to find full reflection in this new agenda, social standards, public participation and respect for our environment do not. We think that there is both scientific and civil society unease about the way that the Framework is being organised and about the priorities it is proposing.

Nothing in "science" dictates thematic programmes or the priorities of research funders. Science can be steered in various ways to fulfil different functions: broadening our understanding of our world; or providing experts, tools and data for public policy making independent from business / industry lobbies; or commodifying nature and knowledge etc.

Critical citizenship has a positive role to play in the building of a democratic knowledge-based society. This society requires the diversification of the types of knowledge recognized as relevant. Innovation should become an important site of democratic experimental practice with more bottom-up experiences and an up-stream approach. The debate about "Which society do we wish to build and which research do we promote for this" is a debate about which vision of the world society we should hold and develop.

We believe that, for example, there should be major research initiatives focused on the problems facing society – on public health and well-being rather than on genomics; on low-input and sustainable food production rather than on intensive agriculture; on tackling climate change

through renewable energy and efficiency not through more nuclear power; on processes which resolve conflict in a non-military way rather than through military might; and on societal consequences of technological choices both in Europe and the wider world.

The European Commission should make sure to:

- Frame the themes of the Common Strategic Framework towards social, environmental and public health goals
- Open a consequent amount of research money to civil society control
- Minimise the direct and indirect control of the allocation of research money by industry.

Now is the opportunity for Europe to seize the chance of a better vision for its citizens and those of the wider world. There is no bigger practical statement of our hopes and aspirations for the future than where we place our research money.

Tackling societal challenges

Questioning openly and democratically the frames and assumptions that shape "the politics of knowledge" and increasing the societal relevance of research implies numerous questions: In which cases and how can civil society be fruitfully involved in the regulation and production of scientific knowledge? How to prepare civil society organisations to participate in foresight and science policy activities and in re- search projects? How to get scientists interested in projects with CSOs? How to make the case to policy makers for the constructive participation of CSOs in research? How to ensure that scientists and CSOs can build common projects in the future research and innovation Frameworks?

The European vision of a "Knowledge-Based Society" demands early dialogue between scientists, policy-makers and civil society. But there are strong barriers to overcome to achieve a meaningful participation of civil society in research. (The "Science in Society" activities led by the European Commission since 2001 have hereby contributed to a deeper understanding of the challenges that lay ahead).

There are many forms through which scientists and research institutions can engage with society. For the last two decades, partnerships have mainly and increasingly taken the form of "public/private" partnerships with industry, under the impulsion of governments and businesses, with the primary goal of improving the competitiveness of our economies, and therefore contributing to job creation. This particular angle of science and society relationships is clearly illustrated by EU agendas, and continues to be reflected in the discourses of many research policy-makers.

Though States – and taxpayers – continue to be the main funders of research, this focus on competitiveness has allowed the industrial sector to enjoy a strong and increasing influence on the priorities of public research. The benefits of this focus, even in terms of job creation, are not always thoroughly evaluated, and not as clear as one could expect given the prominence of this discourse.

But it has had serious consequences on the way research is organised: scientists are more likely to obtain credits and career advancement if their work is seen as relevant by the industrial sector, and research institutions have been pushed into adopting norms and values from the corporate

world, that are not necessarily compatible with their methods and objectives. What are the consequences of this situation on access to data and research material, on the circulation of knowledge, on the deontology of scientists and on the validity of research results? Such questions are also relevant for policy makers, who use research results in the design of public policies.

This also implies a serious and challenging examination of the every day role of scientific advice in the Commission and in Member States. Exercises on "risk communication" and public participation should not ignore structural political and economic issues that underlie public concerns about both the governance of science and technology and the role of science and technology in governance. This calls for the setting of procedures of expertise that are transparent, pluralistic and contradictory. Here numerous existing experiences can be inspiring. There are more and more attempts to associate both policy-makers and civil society, together with researchers, in the definition of research needs, and research questions.

The construction of a "Knowledge based society" should not be confused with the mere creation of a common market for knowledge.

In the 21st century, our societies face immense ecological, social and economic challenges that will not all simply be solved by new technologies. It is certainly not a time for "business as usual". It is the right time to encourage individual and collective experimentation. Taking risks and being innovative does not mean continuing on the same path as for the last 30 years. It means making the right decisions to allow our societies to change for the better. Present times are full of challenges, but they are also full of opportunities. Knowledge creation is not a privilege of universities and businesses anymore, and it is more crucial than ever, not only for the design of new technologies, but also for socially and ecologically driven innovation.

Our collective capacity to create more societally relevant knowledge will ultimately depend on people, their curiosity to explore new grounds, their openness to engage with new actors, their willingness to change their habits and ways of thinking. Policy makers at all levels, and the scientific community, can create the right conditions for social and technical innovation towards sustainable development, so that scientists engaging in new experiences are rewarded rather than punished for not following the mainstream.

After all, the idea of cooperation, instead of competition for power and resources, is the very founding idea of the European Union, and has proven to be a rather successful one.

Strengthening competitiveness

Technologies can contribute to solving problems, but it is important to evaluate their social and ecological impact. (For example, the social, moral and political consequences of bio- and nanotechnologies - and of their convergence - are huge, and largely new in their nature.) Different technological choices can have different impacts on society. Besides, solving problems or achieving change is rarely only a matter of technology.

Nowadays, technological innovation is too often framed as "one way" progress, and there is not much consideration about the direction of such progress. There might not be any general distrust in science and innovation, but there are grounded concerns in society over the directions of science and technological development.

Make space for alternative narratives of research and innovation

The pervasive focus in research agendas on "competitiveness", technological innovation and the contribution of research to growth (in the narrow sense of a growth of GNP rather than referring to prosperity), as an overarching principle of EU policies, seriously narrow down the options and possibilities of sustainable innovation responding to social, ecological and economic demands.

Research is often portrayed as a race, for which the only alternative is to go faster or slower, but with no choice over direction. But scientific and technological choices are shaped by the social and economic context, by values and vested interests. In a democratic society, acknowledging that science and technologies involve politics means that new and alternative narratives should be recognised institutionally and politically.

Today's R&I programmes are too much focused to and oriented by private industry interests and short-term profits. The future vision embedded in these priorities and allocations is one of a society driven by technology and technological solutions rather than by societal solutions. The programmes should be much more focused on societal needs. Opening a societal debate, far from restricting the freedom of scientific endeavours, will open new possibilities and options that are not restricted to the immediate search for profit.

Taking the concept of "Knowledge Society" seriously involves making it a more inclusive concept by acknowledging the legitimacy and valuing the relevance for policy-making and for scientific research of the knowledge of all sectors of society, not only the knowledge located in universities and businesses. Interactions generate new forms of social intelligence and create mutual benefits.

Strengthening Europe's science base

The prevailing description of the nature of the scientific activity as "free", "pure" and "universal" was first contested by historians and social scientists, who see it as a discourse fulfilling a political and ideological function: the affirmation of the obvious superiority of the scientific approach for knowing and understanding the world, of its objectivity and neutrality, and the justification of the complete separation of the realms of "science" and "democracy".

Nowadays the quality of a research project is mainly evaluated according to two elements: the number of articles published in journals with a high impact factor, or the number of patents it yields. As these criteria allow for the construction of quantitative indicators at the macro-level, they are also used in research policy-making.

Research has been pretty much shaped by an industrial logic, based on the production of new "products". "Papers and patents" is a good summary of these trends. They may explain why science has come to be seen mainly as a purveyor of new high technology products and of competitive advantage, and why the expectations placed on technological innovation by a lot of policy-makers are so high.

Consequently, key research and innovation domains are not prioritised by current national and European policies, and the production of new knowledge, even is highly needed, advances only slowly. These domains include notably renewable energies and energy efficiency, organic and small scale agriculture including soil conservation, systemic approaches in biology, environmental health, health prevention, toxicology, social processes for overcoming gender and racial discrimination, resource efficient & clean production, sustainable consumption and lifestyle.

However, there is nothing in "science" that dictates thematic programmes or the priorities of research funders. Furthermore, many of these priorities, for example agriculture and conflict resolution, emphasise the importance of a localisation of the research agenda – making research responsive to local needs in working with civil society organisations and citizens – rather than an assumption that all research needs to be applicable Europe- (or world) wide. Many of these technological advances also need the explicit incorporation of the social sciences to understand how innovation can best be incorporated into society in an effective way.

Acknowledge the value of CSO participation to research

Participatory and cooperative research with civil society actors has value in different aspects. It can help solve concrete problems by putting research at the service of CSOs and local communities. On the other hand CSO participation to projects can also help researchers moving forward in our understanding of complex real world situations, of the multi-dimensional (economic, social, environmental) challenge of sustainable development, and in developing integrated solutions. It allows the identification of research gaps and to address issues neglected by mainstream research. Participatory research leads to adopting a problem-based and trans-disciplinary approach. It allows tapping into other forms of knowledge and can open new innovation paths.

More opportunities to engage

There are still few mechanisms allowing and funding research partnerships between CSOs and research institutions. Therefore, there are still few opportunities for CSOs to engage in research, and for scientists to engage in research partnerships with civil society, both at the EU and national levels. The availability of funding is both the key driver and the main barrier to CSO engagement in research. The existing experiences have been successful and have attracted considerable interest. There is a need to dedicate more support and more funding to such mechanisms, and to ensure proper information about these opportunities, both towards CSOs and researchers.

Reward public engagement of scientists

The reward structure and the systems of career advancement need to be adapted if we want a real two-ways dialogue to emerge. The Commission could initiate a large participatory process aimed at elaborating guidelines on how to extend the basis on which researchers are evaluated, adapt evaluation processes to the constraints of participatory research, and reward public engagement. It takes time and commitment to get involved in research partnerships, and this contribution should be rewarded rather than punished.

Create long-term relationships and places for meetings

Experience shows the importance of the existence of relationships anterior to the construction of an academia - civil society research partnership, so as to enable the groups involved to go beyond the primary representations they have of one another. But there are few places where such relationships can emerge; there are few spaces for dialogue and few opportunities for CSOs and researchers to meet. There is a lack of knowledge brokers, who could operate this important matchmaking activity. It is crucial to have spaces and opportunities for mutual learning to take place, for partnerships to emerge, but also for the expression of conflicts and tensions, that are a condition for learning.

Increased support to Participatory Research

The EU support to developing partnerships between scientists and CSOs in research and to capacity building through its "Science in Society" and "Science and Society" activities has been crucial both in practical and symbolic terms. It should be strengthened and valorised by the Commission. (For instance, under FP7 and in future framework programmes, the Commission should gradually open up to at least 10 % of yearly FP budgets to research in partnership with CSOs, notably in thematic priorities such as health, environment, transport, energy or agriculture).

Mapping civil society research needs and agendas

Design a process to map and identify the research needs of civil society, both at the micro and macro levels. At the EU level, forums or platforms gathering CSOs, policy-makers and scientists could be set up on a thematic basis to identify research needs, shape them into research questions, and design research agendas. The involvement of CSOs in research governance could thus take the form of permanent thematic forums with meetings on a regular basis. Such forums could provide a place to meet and help long term partnerships to emerge, where research needs and relevant research questions are identified, both for policy-makers and civil society. The Social Platforms recently created in the field of Social Sciences and Humanities are an interesting model and should be further developed. The concept (gathering CSOs and researchers with the purpose of designing research agendas on a given theme or issue) should be extended to other areas (Environment, Food and Agriculture...).

Enlarge scientists' curricula

University curricula of scientists should more integrate a critical review of science. This review should propose reflexions on such issues as public research for whom and what, participatory methods in research, different models of innovation, conflicts of interest, the political and ideological dimensions of science, diversity in science, the notion of scientific excellence, public research and patents, governance of research, science and market, science and democracy, etc.

Encouraging the professional mobility of researchers to CSOs

The professional mobility of researchers from public research institutions to the non-profit sector should be supported for instance through Ph.D. and postdoctoral grants. Individual fellowships for senior researchers who wish to engage in research projects with CSOs would also support this mobility. Marie-Curie-like-actions could be envisaged.

Engaging Universities and Research institutions

Besides research and education, service to community and civil society should be included in the mandate of universities. The EU could support this mission of universities by helping them build relevant tools and appropriate processes to respond to local demands or to demands of general interest carried by CSOs. The Commission could stimulate the creation within research institutions of structures that support CSO participation (knowledge brokers), for example through the use of ERANETs. The Commission could support the creation of a network of European Universities engaged in participatory research.