



PERARES Deliverable 8.1

Experiences and attitudes of Research Funding Organisations towards public engagement with research with and for civil society and its organisations

December 2013

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This publication and the work described in it are part of the project
Public Engagement with Research and Research Engagement with Society – PERARES which
received funding from the European Community's Seventh Framework Programme
(FP7/2007-2013) under *grant agreement* n° 244264

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ACKNOWLEDGEMENTS

This report is built on contributions from

Ms Eileen Martin and Dr Emma McKenna, Science Shop, Queen's University Belfast for the country reports for UK and Ireland,

Ms Michaela Shields, Bonn Science Shop, for the country report for the Netherlands,

Dr. Andreas Kött for the country report for Germany,

Dr Glen Millot and Dr Claudia Neubauer, Fondation Sciences Citoyennes, Paris, for the country report for France, and

Prof. Rodica Stanescu, University Politehnica of Bucharest (UPB - InterMEDIU Bucuresti and Carlo Mango, Fondazione Cariplo, Milano, for their contributions to the country reports of Romania and Italy.

We would also like to thank all of those interviewed for this report for taking the time to share with us the key issues and possibilities and experiences with regard to the funding of research which included the requirements, needs and interests of civil society groups in various European countries. In particular we would like to thank all our colleagues from PERARES for their support and comments.

Norbert Steinhaus,
Bonn, December 2013,

Disclaimer:

PERARES is an FP7 project funded by the European Commission. The views and opinions expressed in this publication are the sole responsibility of the author and do not necessarily reflect the views of the European Commission.

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Executive Summary

This report is an output from the European Commission funded Public Engagement with Research and Research Engagement with Society (PERARES) project. This project aims to establish a deeper and more systematic engagement of research bodies (such as universities, research councils, Science Shops and others) with civil society groups in setting research agendas, and to advance this by transnational exchanges of experience and mutual learning. One element of this work has been to better understand the experiences and attitudes of research funders across Europe towards public engagement with research with and for civil society and its organisations.

This report should enable research funders throughout Europe to better assess the options to take PER (Public Engagement in Research) activities up in their strategy and thus contribute to European policy and the future of the European Research Area (ERA). It does this by giving an overview of experiences and attitudes of research funding organisations in different countries towards research with and for civil society and its organisations. This type of research engagement can make civil society a partner in identifying and responding to the "Grand Challenges" of our time to which European research should respond according to the Lund declaration.¹

The Ljubljana process, which aims to make European research more effective, calls for an improved governance of the ERA, involving universities, research organisations, and civil society.² More equitable access to science and technology, and more response from civil society to science and technology are necessary to achieve the ideal of a knowledge society capable of sustainable economic growth and greater social cohesion.

It should be noted that this report focuses solely on the experiences of research funders and therefore does not examine whether or how CSOs themselves feel they have been – or should have been - involved in research funding. Interviews took place in the UK and Ireland in spring and summer 2012, in Germany and the Netherlands in late 2012 and France in early 2013 whilst further information was also gathered from Canada, Romania, Italy and Spain and the European Commission. The Monitoring Policy and Research Activities on Science in Society in Europe (MASIS) reports provided background information on the situation across Europe³ and this research seeks to add another layer to this work which examined Science in Society in 38 national reports from a range of European countries.

¹ Lund Declaration, Swedish Presidency, July 2009
(www.se2009.eu/polopoly_fs/1.8460!menu/standard/file/lund_declaration_final_version_9_july.pdf)

² Council of the European Union: Council conclusions on the launch of the "Ljubljana Process" – towards full realisation of ERA, Press Release, Brussels, 29-30 May 2008.

³ www.masis.eu

Experiences varied across the different countries. In the United Kingdom (UK) and Canada and increasingly within the European Commission itself, there is a strong policy context for research funders in supporting public engagement with research. In Germany and the Netherlands there is also support amongst some funders for engaged research but at a less embedded level. In France there is an increased interest in the involvement of CSOs in research at both the local level and especially at the regional level. The new law on the organization of higher education and research also opens several modest possibilities in the science and society landscape. In Romania the new National Strategy for Research, Development and Innovation (2014-2020) is expected to involve stakeholders from “civil society, social partners, etc.” including CSOs. In Ireland, Spain, and Italy, the infrastructure is still being developed, however there is some interest amongst funders in how to move forwards in this field.

Key findings:

- A wide range of terms are used to describe engaged research with civil society organisations. This has an implication for levels of understanding of research partnerships amongst research funders. For example community engaged research or *bürgerbeteiligte Forschung* is used in Germany whilst in the UK Public Engagement with Research is the accepted terminology. Some countries are still developing an adequate terminology to describe this work.
- There are national and international commitments to research partnerships and an emerging interest in examining and spreading out models of good practice in research with and for CSOs.
- There are many models of good practice across Europe of research funding organisations supporting research with and for CSOs and building infrastructure to support this work, some of which are explored on pages 15-17 and 117-123.
- Even in countries where there is less of an understanding of research with and for society, there is some interest in how this is done in other places. When research with and for CSOs was explained, interviewees from research funding organisations often expressed an interest in the concept.
- These models are often isolated and lessons learned do not necessarily feed into the larger research funding structures, nor (with some exceptions mentioned here) are they generally exchanged at a national or cross national level.
- In many countries the healthcare sector in particular has led the way in engaged research with and for CSOs.
- Research with and for CSOs often does not fit into structures of applied research. Firstly, research funding policy to support applied research is often related to income generation rather than research with and for society. Secondly, funders reported that there is

still a perceived tension between the understanding of academic excellence (in curiosity driven research) and social relevance, leading to some resistance amongst academics to the idea of engagement.

- To date, European funding programmes have represented the only significant mechanisms for supporting EU-wide coordination and collaboration in Science with and for Society research. The actions supported have already made, and will continue to make, important contributions to both the understanding of problems and the development and widespread dissemination of effective solutions.⁴ Several correspondents to the MASIS report note that the framework programme is the sole vehicle for accelerating efforts, because there is no funding (Hungary, Cyprus, Sweden) or insufficient funding (Czech Republic) available on a national level within the area of Science in Society or mention an undeveloped SIS research culture (Ireland) as the explanation for this tendency.⁵
- Horizon 2020's focus on Responsible Research and Innovation (RRI) is acting as a driver to encourage research funders to consider research with and for civil society. It was explicitly mentioned in this context by funders in the UK, Ireland and Germany.
- Research funders felt that to get a better understanding of research with and for CSOs they need information to improve understanding and knowledge of methodologies for research with and for CSOs and structures to support this work. They suggested that this need for understanding also applies to the majority of researchers.
- Where research funders have developed policy and practice to support research with and for CSOs, there has been strong leadership which has enabled changes in structures, support and funding.
- Where models of funding are shared, interesting practice develops. For example, the PICRI funding model and the 'Researchers-Citizen' programme in some French regions were based on the Canadian CURA programme, which allowed the organisation and implementation of complex and innovative research and fostered the mobilisation of knowledge towards participants. The CURA programme itself, in turn, was inspired by the Dutch Science Shop model.
- Another good model, at the European level, is the FP7-funding scheme 'Research for the Benefit of Specific Groups – Civil Society Organisations (BSG-CSO)' which allows CSOs find responses to their needs. This scheme was inspired by both the Science Shop model and the CURA programme.

⁴ technopolis [group] & Fraunhofer ISI (Dec 2012): Interim evaluation & assessment of future options for Science in Society Actions, http://ec.europa.eu/research/science-society/document_library/pdf_06/executive-summary-122012_en.pdf, last accessed 4.11.2013

⁵ http://www.masis.eu/files/reports/monitoring-policy-research-activities-on-sis_en.pdf#page=1&zoom=auto,534,691, p.57

- There are also good models for supporting culture change and sharing practices, such as the National Coordination Centre for Public Engagement in the UK, or competitions such as 'Mehr als Forschung und Lehre' initiated by Donors Foundation for German Science.
- Some funders suggested that there was a need to ensure visibility for and support research with and for CSOs activities. Institutional mechanisms such as Science Shops⁶ may offer one way to ensure visibility for this work. Even in countries who had a strong commitment to carrying out research with and for society, it was acknowledged that this process is still in development and further lessons need to be learned.

Summary of Country Reports:

The main **United Kingdom (UK)** research funding agencies, notably the Research Councils, and the national funding councils, have worked together to build a vision for a research culture that values, recognises and supports public engagement. Public engagement is now written into research funding policy at all levels and in interview, funders confirmed that this will continue for the foreseeable future. A shared set of priorities and a shared language for this work have been developed alongside an overall strategic framework. Funders have made an explicit commitment to public engagement via the *Concordat for Public Engagement*, and have encouraged Higher Education Institutions (HEIs) to make a similar commitment by signing up to the *Manifesto for Public Engagement*. Funders have also put in place a range of resources to encourage and enable academics to participate in research which will have a social or economic impact. For example, RCUK (Research Councils UK, the strategic partnership of the seven research councils) has developed guidance for researchers to help them understand the routes to economic and societal impacts in the form of *Pathways to Impact*. Alongside the Wellcome Trust and the national research funding councils, RCUK also co-funded the *Beacons for Public Engagement* and the *National Co-ordinating Centre for Public Engagement*, both of which seek to support and embed culture change in HEIs. More recently, RCUK has funded eight *Public Engagement with Research Catalysts* across the UK.

The key research funders are therefore encouraging research that shows evidence of public engagement and public benefit. This report finds that whilst the infrastructure has been established at a policy level, this is still in the process of being translated to practice and some

⁶ The mission statement of Science Shops (by that or any another name) is: A Science Shop provides independent, participatory research support in response to concerns experienced by civil society. Science Shops use the term 'science' in its broadest sense, incorporating social and human sciences, as well as natural, physical, engineering and technical sciences. Science Shops seek to: provide civil society with knowledge and skills through research and education; provide their services on an affordable basis; promote and support public access to and influence on science and technology; create equitable and supportive partnerships with civil society organisations; enhance understanding among policymakers and education and research institutions of the research and education needs of civil society; enhance the transferrable skills and knowledge of students, community representatives and researchers (www.livingknowledge.org). With a history of over 30 years, Science Shops have proven to be a regular part of the research strategy in several research institutes, and their numbers continue to grow.

funding agencies have a much clearer remit for working with Civil Society Organisation (CSO) sector than others given their disciplinary areas. However more recently, UK rhetoric at governmental level has been heavily focused on economic rather than social impacts. It will therefore be important for UK CSOs to ensure that they take the opportunities currently being offered.

Public engagement in research in **Ireland** is still in early stage of development. With a few exceptions, research funders agree that there is little experience of incorporating the needs of CSOs into funding streams and little co-ordination across funding agencies in this field. However Ireland's recent economic difficulties have led to a renewed strategic focus on research as the engine of innovation and the cornerstone of a knowledge economy. There is an emphasis on research which delivers direct benefits both to the economy and to society. This was confirmed in the 2011 National Strategy for Higher Education to 2030 and in the Research Prioritisation Report which stresses research with potential economic benefits.

Several key Irish research funders stated that they were exploring methods of engagement to ensure that research demonstrates both economic and societal impact and there is an interest in building capacity amongst Irish researchers which will assist them in accessing international research funding, particularly through Horizon 2020. Irish funders expressed an interest in and a willingness towards taking this agenda forward and to work with other research funders across Europe to do so.

In **the Netherlands** part of the government responsibilities for research funding is carried out by intermediary funding organizations such as Netherlands Organisation for Scientific Research (NWO) which is the main funder of research in the Netherlands and receives 500 million Euros per year.

Research with participation of CSOs doesn't appear to play an explicit role. Scientists and researchers focus on the scientific criteria of publishing. Some interviewees reported that the scientists find the structures to integrate CSOs in research insufficient. It doesn't seem to be clear why and how to take the research questions from the CSOs into account. To ensure the quality of the research, the national research funder focuses more on valorisation than on incorporating the needs of CSOs in research.

However participation of CSOs in research plays a stronger role in a number of health care projects and there is a growing interest among patients and patient organizations to talk about the content and organization of the scientific health research.

In **Germany** for many funders as well as for many scientists community based research continues to be a relatively unknown form of scientific work. On the other hand they expressed that from their experience citizens wish to an increasing extent to be included in scientific decision-making processes dealing with the societal challenges of the present day and demanded that more should be done to conduct research in this manner. But industrial foundations, organisations primarily concerned with basic research, as well as community foun-

dations, have hardly ever considered the subject of research with and for CSOs. The dialogue forums set up by ministries or federal agencies can to a certain degree be seen as platforms for input to research agendas when adequate participation of all societal groups is guaranteed. However, new research questions were generated from the results of completed or ongoing research projects.

At BMBF (Federal Ministry for Education and Research), one of the largest research funders in Germany, it was not possible to conduct an interview because there was no clarity about where the responsibility for community engaged research lay, and no one therefore felt authorised to discuss it. Nevertheless BMBF was considered as central addressee of participation efforts when setting research agendas: because it is main supporter of publicly funded research and it is the most important (partly exclusive) sponsor of major research communities and organisations. BMBF's support of specific research fields should be in the focus of efforts to participative agenda setting.

There are first indications for including citizens' participation and transdisciplinarity into funding programmes. Even if in the near future only few opportunities for non-institutional civil society organizations will be found to back for their scientific questions and projects, it seems the right time to move community based research out of the margins during the coming years.

Other Sources:

Some of these key findings have also been endorsed by other bodies at the European level. President Barroso's Science and Technology Advisory Council recommends in its policy paper 'Science for an informed, sustainable and inclusive knowledge society' that "The Commission should invest in more and more inclusive pan-European citizen participation and involvement programs aimed at advising the Commission (and/or the European parliament) on science- and technology issues. A major topic should be the inclusion of evidence-based and precautionary decision making as important elements of dealing with opportunities and risks of new developments. Furthermore, the Commission should encourage meetings, conferences and symposia directed to bringing experts, civil society and policy-makers together".⁷

The European Commission-funded CONSIDER project (Civil Society Organisations in Designing Research Governance) suggested that CSO participation in research is not an unconditional good, and that in order for CSO involvement to be positive, expected benefits need to be more clearly defined. This can influence the choice and role of CSOs. They suggest that where CSO participation is desired, funding schemes and calls should be adapted and de-

⁷ http://ec.europa.eu/commission_2010-2014/president/advisory-council/documents/stac_policy_paper_no_1_290813.pdf, last accessed 4.11.2013

signed in such a way that CSO characteristics can be accommodated. Participation procedures should be simplified and administrative obstacles minimized. While the CONSIDER research has revealed substantial CSO involvement in research, their findings also suggest that most actors in research projects are not aware of options and models of such involvement. Participants have voiced a desire for mechanisms that allow them to share good practice, exchange experience and communicate about different options.⁸

Conclusion

The concept of public engagement and its importance to a responsible research and innovation process has evolved rapidly over the past decade. Within the current economic climate and within the context of the major challenges facing society, a deeper engagement by the public in science and technology processes is necessary to ensure that appropriate pathways are followed and that continued high levels of investment in research and innovation are delivering the outcomes that society needs.

In Horizon 2020, the European Commission suggests that for research and innovation to be 'responsible' it should be oriented towards societal needs and should be conducted in a manner that society finds acceptable. In order for this to happen society should be engaged at all stages of the research and innovation process, from the setting of research priorities through to the take-up and exploitation of new technologies. Increasingly it is expected that public engagement will not only improve public confidence, trust and support, but will also lead to more creative inputs, improved decision-making and the development of more appropriate and effective solutions. It is clearly essential for further development and progression of research on science in society that European support mechanisms are in place.

Public consultations revealed that research funding programmes can still involve a greater degree of public input to their design and implementation, with the aim of increasing the public relevance and utility of the supported activities. Successful public engagement is dependent on strong connections between the various stakeholders and on suitable structures and mechanisms for public engagement to be established. There is a clear need to ensure 'full' public engagement throughout the entire research process.⁹ The importance of the European Framework Programme support structures for research in this area has to be emphasized. This report finds that whilst there are good practices in developing responsible research amongst research funders, even in countries where there is a strong strategic commitment, much work remains to be done if CSOs are to be truly engaged in research.

⁸ <http://www.consider-project.eu/wp-content/uploads/2012/04/CON-PB1-1.5.pdf>

⁹ technopolis [group] & Fraunhofer ISI (Dec 2012): Interim evaluation & assessment of future options for Science in Society Actions, http://ec.europa.eu/research/science-society/document_library/pdf_06/executive-summary-122012_en.pdf, last accessed 4.11.2013

Recommendations:

Research funders who wish to consider public engagement with research with and for civil society organisations should:

- Actively seek opportunities to exchange experiences on how to fund and co-fund research with CSO at both a country and European level. The development of an arena for funders to share good practice in this area on national and international level can support the necessary exchange
- Explore a formal model of engagement with CSOs where interests are shared
- Consider reviewing the allocation criteria for calls for proposals and funding programmes to encourage research with and for CSOs in universities. Revised criteria could include an emphasis on transdisciplinary research or making citizen participation a condition of funding
- Consider how to involve CSOs at *all* stages of the research process, from advising on and designing funding schemes, calls or projects, to evaluation of proposals and research outcomes
- Increase the transparency of decision-making processes in the setting of research agendas in large research communities
- In those cases where CSO participation is warranted, research schemes and calls should be designed in such a way that CSO characteristics can be accommodated. Participation procedures should be simplified and administrative obstacles minimized.¹⁰

Universities and HEIs who wish to consider public engagement of research with and for civil society organisations should:

- Embed public engagement with research as a concept in research training at all levels
- Consider mechanisms for co-ordination of citizens and university research, such as setting up contact points for civil-society groups to enable an active engagement in research with and for CSOs (eg Science Shops)
- Consider international exchanges and mentoring on experiences and models of public engagement within the HEI context. For example this could include sharing practice on funding schemes for public engagement projects, on cooperation and networking, on agenda setting with an by CSOs, or curriculum development as a way to encourage dialogue and broaden the discussion of public engagement
- Work with CSOs to ensure that benefits and drawbacks are clearly articulated

¹⁰ <http://www.consider-project.eu/wp-content/uploads/2012/04/CON-PB1-1.5.pdf>

Civil Society Organisations (CSOs) who wish to become involved in research should:

- Take every opportunity to lobby by attending meetings, talk to scientists, administration, and policy makers or write their specific requests into policy briefs
- Examine ways of developing skills around commissioning and managing research and build up skills and knowledge to impact research agendas
- Seek opportunities to become involved in developing and assessing research funding streams
- Look out for small scale funding schemes which might support them to develop research partnerships

Co-ordination actions:

- Further research with CSOs is necessary to understand their views on how and where they impact research agendas.
- There is a need for capacity building and improvement of communication between CSOs and research funders to build a better understanding of where agendas might be shared.
- There is a need to share models of good practices across Europe.

Good Practice Examples

Co-ordination

In the **United Kingdom**, *The National Co-ordinating Centre for Public Engagement* [NCCPE] was established in 2008 as part of the Beacons for Public Engagement initiative. It aims to co-ordinate, capture and share learning between the Beacons and across UK higher education institutions [HEIs] and research institutes¹¹ and has provided support to many HEIs in terms of embedding public engagement with research. It provides a range of resources on its website including guides to public engagement, case studies and research reports. It also runs an annual conference *Engage*. It recently received funding from RCUK and Wellcome Trust to continue this work until the end of 2013.¹² For further details see www.publicengagement.ac.uk

In **Germany** the project *Civil Society Platform – Change in Research* initiates workshops and research activities to take a critical look at current directions of research funding. The platform then formulates alternatives that promote problem-oriented research and that support disciplinary and trans-disciplinary research involving more solution-oriented, integrated approaches. The platform includes environmental organizations, development agencies, health organizations, churches, trade unions and other civil society organizations. The office of the Civil Society Platform in turn is under the umbrella of the Federation of German Scientists. It was the first nation-wide coordination activity to formulate CSO views and needs on science policy transparency in the research agenda setting process.¹³

Strategy

In **Ireland**, the *National Strategy for Higher Education to 2030*¹⁴ was published in January 2011. This offers a blueprint for the way ahead for higher education in the Republic of Ireland. It deals with all aspects of higher education, referring to engagement as one of the three core roles of higher education alongside teaching and research.¹⁵ The definition of engagement is broad 'engagement means taking on civic responsibilities and cooperating with the needs of the community that sustains higher education - including business, the wider education system, and the community and voluntary sector.'¹⁶ It sees engagement as

¹¹ NCCPE (2012) *About Us*. <http://www.publicengagement.ac.uk/about/> Accessed 24/5/2012

¹² Interview data

¹³ <http://www.forschungswende.de/index.php>

¹⁴ <http://www.heai.ie/en/policy/national-strategy>

¹⁵ Hunt (2011) Op. Cit. p.5

¹⁶ Ibid., p.74

wide ranging and encompassing a full commitment by HEIs to engage at local, national and international level.¹⁷

Programmes

The Science in Society (SIS) Programme of the **European Commission** aims to promote research's engagement with society and vice versa. As a follow-up to the Commission staff working paper of November 2000 'Science, Society and the Citizen in Europe'¹⁸, which established the basis for the debate on the relationship of science and technology with society, the European Commission published a Communication on 4 December 2001. This paper sets out the Science and Society Action Plan making the 'Science and Society' theme under Structuring the ERA in the Sixth Framework Programme (FP6) the first ever initiative of its kind on a European scale. It helped increase awareness among research and industry of the need to bring a range of research-related societal issues to the top of the policy agenda. The role of the Science in Society (SIS) Programme now is more important than ever before. Its many activities represent the variety of responsibilities that this role encompasses; from better governance practices and more effective communication methods to the pursuit of a more diverse and robust science workforce in Europe.¹⁹ Science with and for Society has a budget of approximately 400 million Euro in Horizon 2020.

The **Netherlands** Organisation for Scientific Research (NWO) is the national research council. Their 'Responsible Innovation programme' (MVI) funds and encourages research in which the ethical and social aspects of new technology are considered right from the design phase.²⁰ One of the pillars is the *social relevance*: a civil society panel representing the business community and NGOs evaluates the research proposals for their social relevance. Public parties (ministries) and scientists laid the foundation for the programme. NWO provides the programme MVI an annual budget of 1,8 million for funding research available. In addition to the scientific advisory board also a societal panel reviews the grant applications.

Three regions in **France** have established annual calls for projects requiring a partnership between one or more public research structures and one or more civil society organisations. PICRI (Ile de France), ASOSc (Brittany) and Chercheur-Citoyens (Nord-Pas de Calais). They offer financial mechanism for a common research work and equal partnership between non-

¹⁷ Ibid., p. 77

¹⁸ ftp://ftp.cordis.europa.eu/pub/rtd2002/docs/ss_en.pdf

¹⁹ <http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1221>

²⁰ <http://www.nwo.nl/en/research-and-results/programmes/responsible-innovation>

for-profit civil society organisations and academic researchers (universities, public research organisms) with annual budgets between 700.000 and 1.5 Million Euros.

Projects

A major development in the Science in Society funding scheme of **the European Commission** has been the launch of longer-term Mobilisation and Mutual Learning Action Plans (MMLs) since the 2010 Work Programme. The effective involvement and engagement of society in tackling the many challenges being faced requires mechanisms that facilitate cooperation between a diverse range of actors with different types of knowledge. MMLs are designed to bring together actors from research and the wider community (e.g. civil society organisations, ministries, policymakers, science festivals and the media). They collaborate on action plans that connect research activities for a chosen Societal Challenge. These plans encompass a series of SIS actions, such as public engagement, investigating ethics and governance, two-way communication, women in science, and science education. The emphasis is on mobilising all relevant actors and on mutual learning in order to pool experiences and better focus their respective efforts on finding solutions that develop and use scientific and technological knowledge in the public interest.²¹

Science Shops across Europe and beyond have developed their experience in setting up and doing small scale research projects developed in collaboration with and for civil society organisations over the past 35 years. They are professional brokers creating win-win situations among CSOs, HEIs, researchers and students. They receive funding from various sources, like universities (e.g. Netherlands), Ministries or Regional Councils (e.g. Belgium, France). By supporting this infrastructure, the co-operation between researchers and CSOs is supported.²²

²¹ <http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1226>

²² www.livingknowledge.org

1. Aim of the study

The PERARES project aims to get a deeper and more systematic engagement of research bodies (such as universities, research councils, and Science Shops) with civil society groups and advance this by transnational exchanges of experience and mutual learning. To advance genuine mutual engagement, it is necessary to consider and implement forms cooperation between research funders, research bodies and civil society which will make a difference to research strategies and will become part of current research practices. This engagement can make civil society a partner in identifying and responding to the "Grand Challenges" of our time to which European research should respond according to the Lund declaration²³.

There are some examples of good practice, but they are isolated. There is no or only few exchange between organisations funding research. The aim of this study therefore is to examine how research funders across Europe can support publicly engaged research and joint research projects with civil society organisations (CSOs). The report gives an overview on experiences and attitudes in different countries towards 'Research-Civil Society Contact Points' such as Science Shops²⁴. It also outlines opinions on and approaches towards research with and for civil society and its organisations within research funding organisations. This should enable research funders throughout Europe to better assess the options to take the PER (Public Engagement in Research) activities up in their strategy and thus contribute to the European policy and the future of the ERA.

2. Rationale

One of the main challenges in generating and applying knowledge is the task of providing adequate incentives for innovative ideas to prosper, creating the conditions for an intelligent selection and diffusion of knowledge and improving the general level of education and skills so that all actors are capable of handling knowledge professionally and responsibly. The main goal is to enhance the capacity of knowledge production and application, including the development of adequate human resources, in order to bring the advancement of knowledge in line with economic, social, political, and environmental goals that all European countries share.

23 Lund Declaration, Swedish Presidency, July 2009,

(www.se2009.eu/polopoly_fs/1.8460!menu/standard/file/lund_declaration_final_version_9_july.pdf)

24 For the mission statement of Science Shops see www.livingknowledge.org). With a history of over 30 years, ScienceShops have proven to be a regular part of the research strategy in several research institutes.

For Europe to become a sustainable, prosperous, democratic and secure society, it is important that legitimate societal concerns concerning science and technology development are taken on board, entailing an enhanced democratic debate with a more engaged and informed public and better conditions for collective choices on scientific issues.²⁵

Over the years, civil society organisations (CSOs) have been relied on to simply channel scientific results to members of the public, limiting the great potential of this resource. Fortunately, there is now a growing interest from both CSOs and researchers to exchange views and work together from the outset of the research process, creating a better symmetry between the needs of society and how science can address them.

Formally, CSOs are defined as organisations that are non-governmental, not-for-profit, not representing commercial interests, and that pursue a common purpose for the public interest. They are responsible for articulating the opinions of various social spheres, and include environmental groups, minority groups, consumer representatives and patient organisations, to name just a few. As such, a good deal of scientific research is extremely relevant to their interests.

The standard model of science – a traditional top-down approach based on the knowledge of experts – dominates in FP7 research projects; normativity comes from the knowledge and opinions of those involved in the decision-making. CSO involvement in research is still perceived as being fundamental when they give their expertise and when they disseminate the project results and guidelines. CSOs are seen as adding value to a research project by making it more context-relevant. They are also seen as enhancing awareness of policy needs and the needs of beneficiaries.

CSOs also have valuable expertise and often enjoy close links with the people most likely to benefit from research. For their part, most researchers want the knowledge they generate to benefit society in some way, and CSOs can help make this happen. So research organisations (ROs) and CSOs can both benefit a great deal from working together but there are a number of factors, however, that hinder closer collaboration between the two. The FP7 funding scheme for example does not always lend itself to accommodating CSO participation, and some consortia apparently conclude that it is easier to avoid integration of CSOs. Only 30% of project coordinators indicate that CSOs are involved from the start of the project. Project coordinators seem to see CSOs more as "end user representatives" than equal partners. CSOs rarely define the research method and agenda.²⁶ For many ROs, for example, engaging with CSOs and the wider public is viewed as an 'extracurricular activity', and researchers are

²⁵ http://ec.europa.eu/commission_2010-2014/president/advisory-council/documents/stac_policy_paper_no_1_290813.pdf, last accessed 4.11.2013

²⁶ <http://www.consider-project.eu/wp-content/uploads/2012/04/CON-PB1-1.5.pdf>

not always rewarded for such work. Furthermore, application forms for research funding are configured for ROs, and are not really suited for the kind of contributions CSOs make to projects."²⁷

The role of CSOs in research projects is perceived very differently by academic institutions and the CSOs themselves. For example, while half the CSOs surveyed describe themselves as initiators of research projects, only 19% of project coordinators ascribe that role to CSOs. CSO members in projects also claim to be advisory board members much more often than project coordinators mention (50% versus 29%). This reflects a tendency among project coordinators to attribute a more passive role to CSO participants. These different perceptions of CSO involvement in research activities may indicate a normative framing conflict about what a CSO's role ought to be inside a research team. Even though CSOs are routinely invited to academic conferences and project meetings, they are valued primarily for their expertise and their network; academic partners value CSO participation insofar as it facilitates dissemination of results and helps test developments. They are more inclined than project coordinators to expect that the outcome of their research projects will make a contribution to societal needs.²⁸

One of the guiding principles of the FP7 Science in Society programme which was part of the 'Capacities' Specific Programme under the Seventh Framework Programme is to contribute to the implementation of the European Research Area through the development of structural links and interactions between scientists, policy-makers and society at large.

The Science in Society (SiS) programme under FP7 ended in 2013 and a new era will be marked by Horizon 2020, coming into force as of 2014. One of the main novelties of H2020 regarding Science and Society will be the launch of a new concept: Responsible Research and Innovation (RRI), a process where all societal actors (researchers, citizens, policy makers, business) work together to align R&I outcomes to the values, needs and expectations of the European society. Technology acceptance through good marketing has expired as valid option. Diversity in Research and Innovation now is a must for a greater creativity and better results. To get there early and continuous engagement of society in R&I is the key to innovation adequacy and acceptance. In Horizon 2020 support to RRI and research on RRI will be found in cross-cutting actions throughout the programme and embedded in the funding pillar on societal changes. Science and/in Society is about to become Science with and for Society.²⁹

²⁷ <http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1298&lang=1>

²⁸ <http://www.consider-project.eu/wp-content/uploads/2012/04/CON-PB1-1.5.pdf>

²⁹ <http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2013/07/41-LK-Newsletter-July-2013.pdf>

3. Monitoring Policy and Research Activities on Science in Society in Europe (MASIS)³⁰

The aim of the European Commission has been to address this challenge and stimulate further cooperation in Europe via the identification of common resources, common trends, common interests and common challenges. The service contract entitled 'Monitoring Policy and Research Activities on Science in Society in Europe' (MASIS) under the Capacities Work Programme Science in Society (2008) has been instrumental to this end. The main activities of the MASIS³¹ project were the design, collection, validation and update of 38 national reports on science in society.

These reports are a valuable basis for a more detailed description of support for publicly engaged research and joint research projects with civil society organisations (CSOs). All single country reports can be downloaded from the MASIS website (<http://www.masis.eu/english/home/>). This report will refer to the MASIS country reports of Romania, Spain, Italy, France, UK, Ireland, Germany and the Netherlands and will set them into relation with findings from own interviews and surveys. In addition previous funding programs, funding schemes and results from Canada, France and the European Commission will be described briefly.

A section of the MASIS country reports and the synthesis report deals with research activities related to science in society, aiming at monitoring the scale and scope of research efforts in the respective countries, including emerging themes, targeted areas, strategies for embedding science in society issues in mainstream research, and funding structures and opportunities for science in society research.

In total, 19 country reports explicitly emphasize a lack of strong and well defined Science in Society research efforts. In several cases, weak institutionalisation, limited national funding schemes, and absence of SIS scientific reviews, are mentioned as part of the explanation. Some countries, such as Norway and the Netherlands, do indeed have academic institutions or research centres that are targeted directly at science in society issues, but in many countries, not least in the new member states, the research activities related to science in society appear to be rather sporadic and, for instance, based on Ph.D. level projects and individual research activities. Systematic and concentrated national research efforts on science in society are scarce.

In 19 out of 37 countries, funding programmes for SIS research do exist to some extent. Funding for SIS research is primarily distributed through two main funding agencies: national research councils and other governmental funding agencies (including ministries). However,

³⁰ www.masis.eu/english/home

³¹ http://www.masis.eu/files/reports/monitoring-policy-research-activities-on-sis_en.pdf

the general tendency among these countries is that funding programmes are only accessible to a limited degree, and that resources for SIS research are generally scarce. UK and Germany are salient exceptions. According to the national correspondents, research focused on the interplay between science and society is highly prioritized in both countries. UK and Germany are also part of the small group of countries, in which non-profit private sector foundations support SIS research.

Conversely, 18 country reports state that no funding programmes specifically targeting science in society issues exist. These are widely dispersed across Europe and include among others Ireland, Israel, Sweden, Italy, Spain, and Luxembourg. Additionally, several Eastern European countries seem to suffer from a lack of funding schemes available for SIS research as well. For some of these countries, funding schemes have been announced but not yet implemented. Instead, research related to science in society has to be financed through other funding channels, for instance through institutional funding (e.g. ministries, research institutes) or project funding (e.g. national funds). SIS research can also be embedded in projects which do not have SIS related topics as the main priority and thus be included in generic programme funding.

Different SIS issues are, to various degrees, taken into account as elements in evaluation of research proposals among the European countries, but some national correspondents explicitly state that SIS evaluative criteria only to a small degree, if at all, play a role in project evaluation. These countries include Albania, Sweden, Latvia, Norway, Romania, Serbia, Slovenia, and Italy. Still, various specific criteria are highlighted by most correspondents as relevant to the assessment of research proposals. Several criteria are mentioned in the national reports, and six main themes can be identified.

Research careers Communication and dissemination activities Ethics Risks and sustainability
Social relevance of research projects Inclusion of stakeholders & Science and industry cooperation.

A small number of countries highlight that cooperation between science and industry is considered important as an evaluative element in project evaluations. Furthermore, Austria and Sweden note that the inclusion of a wide array of stakeholders (beyond 'industry') is taken into consideration when reviewing project proposals.

Given this background this report intend to give some deeper insight on experiences and attitudes in different countries research with and for civil society and its organisations within research funding organisations.

4. Experiences of Incorporating the Needs of CSOs in Research Funding in the UK

The MASIS country report for UK states: In the UK significant sums have been, and continue to be, invested in research at the interface between science and technology, and society. The major sponsors include the nationally funded Research Councils and a charitable foundation, the Wellcome Trust. Funded projects cover a broad range of areas including governance, public engagement, upstream involvement in innovation, public attitudes etc. Although there has been considerable research into public attitudes to science and attitudes towards new scientific developments such as nanotechnology, synthetic biology and geo-engineering in recent times there is no data base on science and society projects in the UK. Programs, aims and objectives that guide the activities of the major funders are outlined in the MASIS UK country report.³²

For the following section of the PERARES country report academic and non academic research funders from across the UK and from the National Co-ordinating Centre for Public Engagement (NCCPE) were interviewed³³.

Policy background

Over the last fifteen years, successive United Kingdom governments have sought to build links between the public sector and civil society organisations (CSOs). The 1997-2010 Labour Government was committed to active citizenship as one of the key elements of its 'third way' philosophy³⁴ whilst the current coalition government espouses big society³⁵ both of which have underpinned a drive towards citizen engagement.

In 2009, the Department for Business, Innovation and Skills published a key report examining the future of universities in a knowledge economy. This report offered a blueprint for the way forward for higher education. It was written in the context of the 'more constrained public spending environment'³⁶ which was already evident at this time. Between 1997-2009

32 http://www.masis.eu/files/reports/updated_fall_2011/MASIS_UK_report_updated.pdf

33 Research Councils UK (RCUK), the Arts and Humanities Research Council (AHRC), the Biotechnology and Biological Sciences Research Council (BBSRC), the Economic and Social Research Council (ESRC), and the Engineering and Physical Science Research Council (EPSRC), the Higher Education Funding Council for England (HEFCE), the Nuffield Foundation, Wellcome Trust and Big Lottery and the National Co-ordinating Centre for Public Engagement (NCCPE).

34 Jochum, V., Pratten, B., and Wilding, K. (2005) 'Civil Renewal and Active Citizenship: A guide to the Debate' NCVO, 6

35 Cabinet Office (2012) 'Big Society' <http://www.cabinetoffice.gov.uk/big-society> Accessed 21/5/12

36 Department for Business, Innovation and Skills (2009) 'The Future of Universities in a Knowledge Economy' <http://webarchive.nationalarchives.gov.uk/+/http://www.bis.gov.uk/wp-content/uploads/publications/Higher-Ambitions.pdf> Accessed 24/5/12. P.3

the UK government had doubled investment in the research base, resulting in ‘more publications and citations per researcher and per pound of public funding than any of our major competitors.’³⁷ One of the central tenets of the strategy was that ‘we will also ensure that we better understand and exploit the ways in which research can make greater economic and social impact.’³⁸ In effect ‘the point is that we need to harvest every possible economic and social benefit from research.’³⁹ CSOs are mentioned explicitly in this strategy, with one of the four major goals under research being ‘establish closer and longer term partnerships between researchers and global companies, local and regional business, and public services and policymakers. Researchers should move more freely between academic and the public, private and third sectors.’⁴⁰ The strategy also recognised that ‘many academics are reluctant to take time away...to work more closely with, or spend time working in, organisations in the private, public or third sector...because they believe it will jeopardise their prospects for career advancement.’⁴¹ It establishes that ‘the government will seek to remove barriers to this kind of interaction and ... will provide incentives for wider engagement’⁴² via Research Councils UK funding and via the Research Excellence Framework, both of which will be discussed in more detail later in this section. This report set the guiding principles for the way forward for research in higher education. Despite a new government being established in May 2010, budgets for Science and for Higher Education Innovation Funding have been protected during the current economic recession, in line with the belief that world class research is vital to the economic recovery.⁴³

This framework, once established, became embedded in research policy both within Research Councils UK and within the regional funding bodies, who have sought to build ‘a vision for a research culture that values, recognises and supports public engagement.’⁴⁴ Funders, including non-governmental funders, have worked together to develop a common language and common set of expectations of academic researchers who benefit from their funding. Impact is defined broadly as ‘the demonstrable contribution that excellent research makes to society and the economy. Economic and societal impacts embrace all the extremely diverse ways in which research-related knowledge and skills benefit individuals, or-

37 Ibid P.55

38 Ibid. P3

39 Ibid. P.57

40 Ibid. P.54

41 Ibid P.67

42 Ibid P67

43 PACEC (2012) ‘Strengthening the Contribution of English Higher Education Institutions to the Innovation System: Knowledge Exchange and HEIF Funding: A Report for HEFCE’

<https://secure.pacec.co.uk/documents/HEIF11-15-FullReport.pdf> Accessed 21/5/12

⁴⁴ RCUK (2012) ‘Concordat for Engaging the Public with Research’

<http://www.rcuk.ac.uk/documents/scisoc/ConcordatforEngagingthePublicwithResearch.pdf> Accessed 23/5/12 P.4

ganisations and nations.⁴⁵ All of the research funders interviewed for this study understood this to include impact with and on CSOs where relevant to their field of work.

In the last year, policy papers issued under the Coalition Government have focused on engagement with business. The February 2012 Wilson Review on university interaction with business acknowledged the role of social enterprise and Small to Medium Enterprises (SMEs) in student work related learning but makes no reference to community interaction. 'The review does not include any consideration of the role that universities play in meeting the needs of the public sector, although the role of social enterprise in supporting charitable organisations is included in the context of enterprise education.'⁴⁶ Whilst the science and research programme funding continues to be ring fenced at £4.6bn,⁴⁷ the current focus at a policy level is almost exclusively on university-business interaction and on the potential economic benefits which may flow from such interactions.

More recently, there has been considerable discussion about making academic knowledge freely available, with Research Councils UK holding a consultation on open access to research and the Wellcome Trust backing a campaign to allow all research papers to be shared online at no cost.⁴⁸

Research funding structure

Funding for academic research in the UK operates in a number of different ways. The majority of research funding for the higher education sector in the UK comes from government (57%), with some support from international sources, the private sector, and charities, particularly medical charities.⁴⁹

Government funding is guided by the overarching strategy from the UK Department of Business, Innovation and Skills. Their commitment to engaged research is clear 'Research Councils and Funding Councils will be able to focus their contribution on promoting impact through excellent research, supporting the growth agenda. They will provide strong incen-

⁴⁵ RCUK (2012) <http://www.rcuk.ac.uk/kei/impacts/Pages/meanbyimpact.aspx> Accessed 23/5/12

⁴⁶ Wilson, T., (2012) 'A Review of Business-University Collaboration' <http://www.wilsonreview.co.uk/wilson-review/wilson-review.pdf> Accessed 22/6/12 P.15

⁴⁷ Department for Business, Innovation and Skills (2011) 'Innovation and Research Strategy for Growth' <http://www.bis.gov.uk/assets/biscore/innovation/docs/i/11-1387-innovation-and-research-strategy-for-growth.pdf> Accessed 16/3/12 P.2

⁴⁸ <http://www.guardian.co.uk/science/2012/apr/09/wellcome-trust-academic-spring> Accessed 24/5/12

⁴⁹ Universities UK (2009) 'Securing world class research in UK universities' <http://www.hefce.ac.uk/research/funding/resfund/QR.pdf> p15 Accessed 16/3/12

tives and rewards for universities to improve further their relationships with business and deliver even more impact in relation to the economy and society.’⁵⁰

The government funding system is ‘a dual support system ...[where]... the funding bodies provide recurring annual ‘block grant’ funding whilst grants for specific projects and programmes are provided by research councils.’⁵¹ The Higher Education Funding Councils in England, Wales, Scotland and Northern Ireland distribute money from their national parliaments as institutional block grants based on research performance. This funding stream is retrospective and based on peer review. In addition, the Department for Business, Innovation and Skills funding distributes funding via the UK Research Councils as individual research grants which are allocated on a competitive basis.⁵²

A further funding stream is available to universities who exceed a £250,000 allocation threshold related to their external income earnings and performance of the sector overall. This is known as Higher Education Innovation Funding and is available ‘to support and develop a broad range of knowledge-based interactions between universities and colleges and the wider world, which result in economic and social benefit to the UK’⁵³ These will be examined in turn.

Block Grant Funding - Research Excellence Framework

The largest part of research funding in the UK comes from the national parliaments in England, Wales, Scotland and Northern Ireland and is distributed via the four Higher Education Funding Councils. In 2007/8, 32% of research funding came from UK HE funding councils.⁵⁴ Commonly known as Quality Related (QR) funding, it is provided as ‘a block grant which allows HEIs the freedom to decide how they want to use these funds.’⁵⁵ Individual HEIs are awarded block grant funding towards research. This is based on their overall research performance in the previous five year time period as assessed by peer reviewers.

The next round of assessment will be implemented in 2014 and will be known as the Research Excellence Framework (REF). Higher Education Funding councils will use the assessment outcomes to inform the selective allocation of their research funding to HEIs, with ef-

⁵⁰ The Department for Business, Innovation and Skills (2010) ‘The allocation of science and research funding 2001/12 to 2014/15 – investing in world class science and research’
<http://www.bis.gov.uk/assets/biscore/science/docs/a/10-1356-allocation-of-science-and-research-funding-2011-2015.pdf> Accessed 16/3/12 p5

⁵¹ Universities UK (2009) ‘Securing World Class Research in UK Universities’
<http://www.universitiesuk.ac.uk/Publications/Documents/WorldClassResearch.pdf> Accessed 16/3/12 p14

⁵² RCUK (2012) *Excellence with Impact*. <http://www.rcuk.ac.uk/pages/home.aspx> Accessed 16/3/12

⁵³ HEFCE (2012) *Higher Education Innovation Funding*. Available <http://www.hefce.ac.uk/whatwedo/kes/heif/>
Accessed 16/3/12

⁵⁴ Universities UK (2009) Op. Cit. P.15

⁵⁵ Ibid., p3

fect from 2015-16.⁵⁶ Research excellence will be assessed in a number of ways. 65% of the weighting will be research outputs (mainly publications), whilst 15% will be assessed on research environment and the remaining 20% of the quality assessment will be based on impact of the research. Impact will include both the reach and the significance of the research and will be examined using a case study methodology. 'The assessment of impact will be based on expert review of case studies submitted by higher education institutions. Case studies may include any social, economic or cultural impact or benefit beyond academia that has taken place during the assessment period, and was underpinned by excellent research produced by the submitting institution within a given timeframe. Submissions will also include information about how the unit has supported and enabled impact during the assessment period.'⁵⁷ It is anticipated that this assessment will provide accountability for public investment in research and produce evidence of the benefits of this investment.⁵⁸ Impacts on CSOs and NGOs can be included although it is not yet clear how this will work in practice. It will not be possible to examine whether this is likely to have any real benefit for CSOs until the assessments are carried out in 2015.

Research Councils

The other element of government funding for research comes directly from the Department for Business, Innovation and Skills and is distributed via the seven UK research councils. The goal of the research councils is to 'support excellent research, as judged by peer review, that has an impact on the growth, prosperity and wellbeing of the UK'.⁵⁹ This amounts to almost £3bn in research funding per year and made up 25% of all research funding to UK universities in 2007/8.⁶⁰

The research councils focus in different academic areas and research funding is not spread evenly across all seven councils. The largest councils are the Engineering and Physical Sciences Research Council (EPSRC) with a budget of £800m pa and the Medical Research Council (MRC) which spent almost £710m in 2010/11. The Science and Technology Facilities Council (STFC) has an annual budget of around £500m whilst the Biotechnology and Biological Sciences Research Council (BBSRC) has a budget of £450m and the Natural Environment Research Council (NERC) has a budget of almost £400m a year. The smaller research councils

⁵⁶ HEFCE (2012) *Research Excellence Framework*. <http://www.hefce.ac.uk/research/ref/> Accessed 2/4/12

⁵⁷ HEFCE (2011) 'Decisions on assessing research impact'
http://www.ref.ac.uk/media/ref/content/pub/decisionsonassessingresearchimpact/01_11.pdf Accessed 24/5/12 P.1

⁵⁸ HEFCE (2012) 'HEFCE business plan 2011-2015: Principles, priorities and practices'
www.hefce.ac.uk/media/hefce/content/about/.../11_34.doc Accessed 24/5/12 P.14

⁵⁹ RCUK (2012) <http://www.rcuk.ac.uk/research/xrcprogrammes/Pages/home.aspx> Accessed 24/5/12

⁶⁰ Universities UK (2009) Op. Cit. P.15

– the ESRC (Economic and Social Research Council) and AHRC (Arts and Humanities Research Council) have budgets of £200m and £100m respectively.⁶¹

Whilst each research council offers funding streams specific to its own disciplinary areas, there are also themes which are cross cutting amongst a number of different councils. These represent areas of research where the topic links to the work of more than one council. To date they have included topics such as sustainable energy systems, living with environmental change, digital economy and food security amongst others. These themes have often been developed in partnership with relevant expert bodies, including CSOs, and there is a strong interest in co-funding streams with external bodies.⁶²

Higher Education Innovation Funding

The final element of the UK government funding system is Higher Education Innovation Funding (HEIF) which seeks to build links between HEIs and the wider world. 'HEIF is designed to support the range of knowledge exchange activities that result in economic and social impact. The funding provides incentives for HEIs to work with businesses, public and third sector organisations, community bodies and the wider public. Activity that can help the country's economic growth is currently a high priority.'⁶³ £150m pa was allocated across eligible English HEIs. HEIF funding is allocated on the basis of a block grant to each institution, who then set priorities for funding in line with their own institutional context. HEIs are expected to submit institutional strategies to their funding bodies.⁶⁴ Of the £601m to be distributed from 2011-2015, it is estimated that £41m will be used to fund civic and community engagement whilst over half of the funding will be used for research exploitation.⁶⁵

Non-government funders

The three non-government research funders interviewed offered different perspectives on funding research between academics and CSOs. Of the non-government funders interviewed, the **Big Lottery** offered the most comprehensive research funding. Whilst its princi-

⁶¹ RCUK (2012) *Excellence with impact: Welcome to Research Councils UK*.
<http://www.rcuk.ac.uk/Pages/Home.aspx> Accessed 24/5/12

⁶² RCUK (2012) *Excellence with Impact*. <http://www.rcuk.ac.uk/research/xrcprogrammes/Pages/home.aspx>
Accessed 24/5/12

⁶³ HEFCE (2012) 'Higher Education Innovation Funding 2011-12 to 2014-15: Policy, final allocations and request for institutional strategies' http://www.hefce.ac.uk/media/hefce1/pubs/hefce/2011/1116/11_16.pdf Accessed 23/5/12 P.2

⁶⁴ Ibid

⁶⁵ PACEC (2012) 'Strengthening the Contribution of English Higher Education Institutions to the Innovation System: Knowledge Exchange and HEIF Funding'
<http://www.hefce.ac.uk/media/hefce/content/whatwedo/knowledgeexchangeandskills/heif/pacec-report.pdf> Accessed 23/5/12

pal activity is distributing funding to improve health, education and the environment via community projects, it also has a focus on learning from good practice which has supporting research funding streams. Between 2007 and 2009, Big Lottery offered £25m in research funding with a goal of helping the CSO sector learn and reflect from current practice.⁶⁶ Volunteering was a particular area of focus with one of the major pieces of research funded examining pathways to participation and lifetime volunteering.⁶⁷ Research carried out under this stream focused on changing policy and practice with a focus on 'enable[ing] VCS organisations to produce and disseminate evidence-based knowledge, to influence local and national policy and practice and, in the longer term, develop better services and interventions for beneficiaries.'⁶⁸ There was an emphasis on organisations who had not previously received research funding. Big Lottery also supported research partnerships via a third party organisation who offered training. There is likely to be another funding round in 2013 which will have a focus on ageing and on disability and Big Lottery are currently examining the possibility of co-funding this work with a research council.⁶⁹

Wellcome Trust funds biomedical research and research in the medical humanities, with a particular focus on human and animal health. It has recently developed a ten year strategic plan where public engagement is embedded in their work. They 'want people to consider, question and debate the key issues in science and society, and so each year we offer over £3 million - through our wide-ranging Engaging Science grants programme - to support projects that encourage people of all ages and from all walks of life to be informed, inspired and involved'⁷⁰ However they have taken a lighter touch approach than the research councils, seeking to work by influence in this area and focusing their resources on creating culture change. In order to support this culture change, they have jointly funded public engagement infrastructure projects alongside RCUK, for example the National Co-ordinating Centre for Public Engagement and the Beacons project which will be discussed in more detail in the next section.

The **Nuffield Foundation** has a remit to improve social wellbeing through education, research and innovation.⁷¹ They 'fund research and innovation in education and social policy. We are also increasing the proliferation and quality of research and professional skills – both

66 Big Lottery (2012) Research Programme. http://www.biglotteryfund.org.uk/prog_research_programme Accessed 24/5/2012

67 Big Lottery (2011) 'Pathways Through Participation: Volunteering as a participation pathway' <http://pathwaysthroughparticipation.org.uk/wp-content/uploads/2011/09/Pathways-Through-Participation-Volunteering-Briefing-final.pdf> Accessed 24/5/2012

68 Big Lottery (2012) Op. Cit.

69 Interview data

70 Wellcome Trust (2012) Public Engagement. <http://www.wellcome.ac.uk/Funding/Public-engagement/index.htm> Accessed 24/5/12

71 Nuffield Foundation (2012) *About the Nuffield Foundation*. <http://www.nuffieldfoundation.org/about-the-foundation> Accessed 24/5/2012

in science and social sciences – through our capacity building programmes’.⁷² Their particular interest is in research which will bring about societal change and they ‘believe [that] policy and practice should be influenced by independent and rigorous evidence.’⁷³ The Nuffield Foundation has no requirement that grant holders are academic, though in practice most are. However Nuffield were interested in CSO and partnership applications where they were relevant to their own research priorities, and were keen to ensure that partners are all equally heard within a project. They have no specific budget for PE but it is certainly possible to fund under their streams. They have also co-funded with RCUK where they have interests in common.⁷⁴

Resources to support Public Engagement

UK research funders are working together to develop support structures for public engagement, including a framework for research funding, the *Concordat for Engaging the Public with Research*. The aim of the *Concordat* is to create a greater focus on and help embed public engagement with research across all disciplines in the higher education and research sectors.⁷⁵ All of the key research funders in the UK, both government and non-government, are affiliated to the Concordat either as signatories or supporters.⁷⁶ UK HEIs have also been encouraged to sign up to NCCPE’s *Manifesto for Public Engagement* ‘We are committed to sharing our knowledge, resources and skills with the public, and to listening to and learning from the expertise and insight of the different communities with which we engage.’⁷⁷ RCUK has also created guidance for researchers in the form of *Pathways to Impact*, which encourage researchers to actively consider, from the outset, who could potentially benefit from their work in the longer term, and consider what could be done to increase the chances of their research reaching those beneficiaries.⁷⁸ These tools offer a shared understanding of the concept of engagement and a shared language of impact across all UK academic research

⁷² Ibid

⁷³ Nuffield Foundation (2012) *Capacity Building*. <http://www.nuffieldfoundation.org/capacity-building> Accessed 24/5/2012

⁷⁴ Interview data

⁷⁵ NCCPE (2012) *Concordat for Engaging the Public With Research*. [http://www.nuffieldfoundation.org/sites/default/files/files/Grants%20for%20research%20and%20innovation%202012\(1\).pdf](http://www.nuffieldfoundation.org/sites/default/files/files/Grants%20for%20research%20and%20innovation%202012(1).pdf) Accessed 24/5/2012

⁷⁶ RCUK (2012) *Excellence With Impact*. <http://www.rcuk.ac.uk/per/Pages/supporters.aspx> Accessed 24/5/2012

⁷⁷ NCCPE (2012) *Manifesto for Public Engagement* <http://www.publicengagement.ac.uk/why-does-it-matter/manifesto> Accessed 24/5/12

⁷⁸ RCUK (2012) *Excellence With Impact*. <http://www.rcuk.ac.uk/kei/impacts/Pages/home.aspx> Accessed 24/5/2012

funders. They contain resources such as a typology of potential research impacts and a range of types of research impacts.⁷⁹

RCUK and the Wellcome Trust have also jointly funded a range of infrastructure projects to support the embedding of public engagement within the Higher Education sector in the UK. The *Beacons for Public Engagement* initiative was a four-year £9.2m project designed to create a culture change across the higher education sector.⁸⁰ It consisted of a network of six beacons which were university-based collaborative centres that helped support, recognise, reward and build capacity for public engagement work.⁸¹ The Beacons also received co-funding from the Higher Education Funding Councils for England, Wales and Scotland where beacons were established in these areas.⁸² The *National Co-ordinating Centre for Public Engagement* [NCCPE] was established in 2008 as part of the Beacons for Public Engagement initiative. It aims to co-ordinate, capture and share learning between the Beacons and across UK higher education institutions [HEIs] and research institutes⁸³ and has provided support to many HEIs. It recently received funding from RCUK and Wellcome Trust to continue this work until the end of 2013.⁸⁴

In April 2012, RCUK awarded funding under a new funding stream *Public Engagement with Research Catalysts*. Eight HEIs have been funded to support researchers to engage the public by creating a culture where excellent public engagement with research is valued, recognised and supported.⁸⁵

Most of the research councils also have a dedicated public engagement team. The goal of these teams is to provide a single point of contact within each council and to share experience and expertise on public engagement. The Public Engagement teams meet regularly to share good practice and experiences between councils. Through these teams, training and support for public engagement is offered to academics. For example BBSRC offers training in consultation on social and ethical issues in partnership with NCCPE. Most of the research councils also ensure that training in public engagement is offered as part of their PhD scholarship programmes.⁸⁶

⁷⁹ RCUK (2012) *Pathways to Impact: Expectations and Policies*.

<http://www.rcuk.ac.uk/kei/impacts/Pages/expectationpolicies.aspx> Accessed 24/5/2012

⁸⁰ RCUK (2012) 'Bridging the gap between higher education and the public'

<http://www.rcuk.ac.uk/documents/scisoc/beaconslaunch.pdf> Accessed 24/5/2012

⁸¹ NCCPE (2012) *The Beacons Project*. <http://www.publicengagement.ac.uk/about/beacons> Accessed 24/5/2012

⁸² NCCPE (2012) *Our Funders*. <http://www.publicengagement.ac.uk/about/our-funders> Accessed 24/9/12

⁸³ NCCPE (2012) *About Us*. <http://www.publicengagement.ac.uk/about/> Accessed 24/5/2012

⁸⁴ Interview data

⁸⁵ RCUK (2012) *Public Engagement With Research Catalysts*. <http://www.rcuk.ac.uk/per/Pages/catalysts.aspx> Accessed 24/6/2012

⁸⁶ Interview data

Key findings

The following key findings are drawn from interview data except where otherwise stated. It focuses on the work of the Research Councils since the Research Excellence Framework is still being implemented and the outcomes will not be known for several years to come.

UK Experiences of incorporating the needs of CSOs in research funding

Almost all of the organisations interviewed had impact and public engagement written in at all levels in their strategies. Engagement was with a broad range of publics which were in part dictated by the nature of the disciplines each council worked with.

Some funding councils had more direct experience of incorporating the needs of CSOs into their research streams than others. The ESRC had been working with the CSO sector for a long time which was unsurprising given their social science focus. At the time of writing, they had an open *Knowledge Exchange* scheme to fund this work directly. This funding stream offers a strong commitment to joint working and this has been strengthened in the most recent call: 'the scheme has now been broadened to also include new, applied, user-led or collaborative research, where applicants are engaging directly with users in shaping the research agenda and in applying social science to current issues relating to policy, strategy or practice.'⁸⁷ The ESRC has also sought to make participation by CSOs easier: 'Following comments from the community on the difficulty of securing cash contributions from user stakeholders, we have changed the scheme's co-funding requirement so that partner contributions can now consist of any combination of cash or in-kind resources'.⁸⁸ They reported that some successful applications in the past had been led by CSOs with academics as partners. The ESRC seminar series and Festival of Ideas are designed to facilitate networking between CSOs and academics. The ESRC also offers seed funding under the KE programme to help to develop dialogue which might lead to collaborative research.

Some funding councils reported different challenges, with CSO engagement much more embedded in funding streams in some disciplinary areas than others. There was broad agreement amongst the interviewees that whilst there was a structure to support working with partners on research issues, one of the major tasks still lay in working with academic researchers to increase their knowledge and understanding of how their own research may be considered through the frame of impact. The key role played by the NCCPE in acting as a bridging mechanism for academic researchers and HEIs interested in public engagement and in changing research culture was acknowledged by virtually all funders.

⁸⁷ ESRC (2012) 'ESRC Knowledge Exchange Opportunities Scheme August-October 2012 Call Specification' http://www.esrc.ac.uk/_images/KE_Opp_Call_Spec_Aug_Oct_tcm8-15361.pdf Accessed 22/8/2012

⁸⁸ ESRC (2012) 'Knowledge Exchange Opportunities Scheme' <http://www.esrc.ac.uk/funding-and-guidance/collaboration/knowledge-exchange/opportunities/index.aspx> Accessed 22/8/12

There were also examples of CSOs being involved in consultation processes around particular scientific issues. Within the scope of this enquiry, it was not easy to establish the impact of such activities from the CSO point of view, or indeed whether the issues raised were equally important to both CSO and academic partner. Further study with CSO partners would be necessary to establish this.

Budget for public engagement and current funding calls open

Funding for public engagement is embedded into the core of the research grant process and into all funding rounds. Funders therefore felt that it was not possible to disaggregate streams which might be more appropriate to public engagement. However cross-council research themes were suggested by several funders as examples where publicly engaged research was flourishing and where CSO questions were embedded from the start. Knowledge exchange themes were also suggested as of particular relevance to CSOs. This is particularly the case for those research councils more focused on the scientific disciplines where applied research with CSOs is less of a cultural norm.

Research funders also suggested that co-funding with charities or external funding bodies offered more opportunities to incorporate the needs of CSOs within funding calls. Charitable foundations also have ongoing funding streams. It should be noted though that most streams are open only to academic applications where CSOs are a partner rather than leading the project. Power differentials are therefore maintained.

Participation of CSOs at all levels

Some research funders offer real opportunities for CSOs to engage in the research policy making process at all levels, both formally and informally. For example, the ESRC's committee structure involves representatives from user groups including both business and CSOs, and their governing council is chaired by a non-academic. These shape policy and strategy within the organisation. Peer review also includes representatives of user groups. Whilst traditional funding streams require an academic lead, within the Knowledge Exchange funding stream at the ESRC, CSOs can be lead applicants and these opportunities have already been taken up by CSOs.

The AHRC is also seeking to build in CSO partners at policy and strategy level, for example in their recent funding round with Heritage Lottery, discussions took place as the funding round was designed and the views and needs of CSOs were incorporated.

Other research councils also offered some opportunities – for example the BBSRC worked with CSOs, particularly medical charities where there was a shared interest. They co-funded a research call on bladder disease alongside Age UK and the ESRC. Their synthetic biology dialogue consulted with churches, consumer groups and NGOs, and the oversight group included a CSO representative.

Whilst the will to engage with CSO sectors was clear from all of the interviewees, it was acknowledged by all that this was a change which was going to take time to embed and settle down. The ESRC, who had a long tradition of engagement, felt that there had already been a 10 year process to get to their level of engagement and that there was still more work to do.

At the level of applied research, the fact that virtually all applications must have an academic lead meant that research relationships were often skewed towards academic partners. The degree to which CSO partners voices were heard varied. Some RCUK representatives had seen examples where partnerships were developed in a very instrumental way with the funding stream in mind. One research council representative acknowledged that it was clear at interview stage where no real partnership existed and that real involvement of partner CSOs often made the difference between funding and not funding a project. Project applications could also be sent back for review to help ensure that research partnerships were embedded. However Big Lottery offered a counter argument, pointing out that whilst partnerships can be formed in response to funding streams, the application process often either embedded the relationship or exposed any gaps. Their view was that such instrumental partnerships can also be the starting point to developing fuller research relationships. The research funders were all aware of the importance of genuine research relationships where the needs and values of different partners are reflected at early stages: however all acknowledged that this may be difficult both to achieve and to assess in practice.

To briefly mention the Research Excellence Framework (REF), whilst it has been designed to incorporate impact, it has yet to be seen how this will work out in practice and the full implications will not be known until 2015. However it has been notable that the REF panels who assess the value of the research have very few non-academic members. It is anticipated however that users will be much better represented in the sub-panels and user panels.

Impact on CSOs

Given the remit of this work, which focuses on research funders, it was difficult to assess how much the agendas amongst research funders had impacted directly on CSO partners.

Evaluation

Most grants are currently in mid flow and it is difficult to know how successful the impact elements are likely to be. The goal is to change mindsets and culture and this is a difficult area to evaluate. However there are many case studies of social and economic impacts of research on the various research councils websites, on the NCCPE website and in the REF materials.

Barriers

Some of the interviewees suggested particular barriers in terms of fully implementing public engagement agendas within academic research. In particular, the skills and aptitudes of academic researchers to work in public engagement were highlighted as an area where much work remained to be done. This had led to the focus on training and on supporting culture change. It was acknowledged that in particular, blockages at mid to high levels within academia were proving more difficult to work through, especially at the level of principal investigator (PI) for research grants, who were often concerned about the time they had available for impact activities. PIs were also often concerned about managing expectations from external partners. However a recent report suggests that this bottleneck is slowly being addressed with 'close to two thirds of academics perceive a positive impact of knowledge exchange on research and ...senior academics are more likely to perceive and impact of KE on research compared with those in more junior positions.'⁸⁹

Research funders agreed that there was little lobbying by CSOs at a strategic level in terms of the research process. Two reasons were suggested. Firstly, public engagement teams within research councils were small and had to focus their resources on raising the profile of public engagement with academics and the HEI sector rather than with external bodies, although those with industry links appeared to have slightly more of an external as well as internal role. That said, some research councils were looking at this more strategically, with AHRC in particular funding a community partners summit in June 2012.

The other issue raised by several funders was the capacity of CSOs to engage with the research process. Whilst many of the larger charities have a sophisticated understanding of research, it was also acknowledged that not all CSOs have either the time or the expertise to influence, commission or manage a research process. Big Lottery for example had put into place a research support mechanism to underpin their research grants round and in particular to help underpin the partnership working between CSOs and academics.

There were models where the research councils were engaging with other sectors, for example industry. The BBSRC hosted industry research clubs such as DRINC with the food industry. BBSRC has formed DRINC to unite the relevant academic expertise to work on innovative problems of industrial relevance, with mechanisms put in place to ensure that UK companies can derive competitive advantage.⁹⁰ It has also formed BRIC, a partnership between BBSRC, EPSRC and a consortium of leading companies to support innovative bioprocess-related research, including that needed for the manufacture of complex biopharmaceu-

⁸⁹ PACEC (2012) Op. Cit. P.1

⁹⁰ BBSRC (2012) *Drinc Background*. <http://www.bbsrc.ac.uk/business/collaborative-research/industry-clubs/drinc/drinc-background.aspx> Accessed 15/5/12

ticals.⁹¹ These mechanisms are set up to help industry shape research funding streams within RCUK. Such models could also usefully be applied to the CSO sector.

Conclusions

There was broad agreement amongst all interviewees that impact and public engagement are vital to ensuring the future of university based research. Research funders had already built this firmly into the structural processes but acknowledged that in practice, it was difficult to tell whether systemic changes had been fully implemented. There was a clear acknowledgement that culture change, particularly amongst academic researchers, was vital.

For this reason, infrastructure projects such as the NCCPE were regarded as essential to underpin the mission statements around impact. This work is still at relatively early stages and it was acknowledged that impact will be easier to achieve in some academic disciplines than others and that public engagement may be differently understood in different academic areas. Some funders were also more likely to look to industry as their automatic partner in developing impact rather than to the CSO sector. It has also been acknowledged that this early stage work will have a number of consequences both intended and unintended and that monitoring will be vital to understanding and unpicking this further. However as one funder put it 'there is travel' and there was a sense that culture change was underway. Co-funding has also offered opportunities for CSOs to have their voices heard within the research funding process. Whilst the door is clearly open to the CSO sector, what is not clear is both their interest in influencing research agendas and their capacity to do so. Overall, however there are many opportunities for CSOs to participate in research agendas, and many are already doing so.

⁹¹ BBSRC (2012) *Bioprocessing Research Industry Club (BRIC)*. <http://www.bbsrc.ac.uk/bric> Accessed 15/5/12

5. Experiences of Incorporating the Needs of CSOs in Research Funding in the Republic of Ireland

The MASIS country report for Ireland states: The Irish government has since the late 1990s firmly committed the country to a path towards a knowledge economy (sometimes "knowledge-based economy, less frequently "knowledge society"). This has been the underlying policy objective of many initiatives in the broader economic sphere and in the specific domains of education, research and innovation. This has also been the underlying theme of some of the policy and public debates on topics relating to the place of science in society.

The primary national challenges in relation to science in society relate to the relatively weak – in European terms – public presence of science and scientists and public interest in and attention to scientific developments. In the political and broader public sphere, ideas and information from science have little resonance, except where they bear on pressing topical issues in, e.g. health, energy or environment.

There are no formal procedures for individual citizens or civil society organisations (CSOs) to take part in priority setting and assessment activities with regard to science and technology. Citizen or CSO involvement was not accommodated.

Citizen volunteerism and CSO participation are strong in many areas of cultural, social and sporting life, but not as strong in political life, outside of political parties.

Science in society research is relatively undeveloped in Ireland and is largely represented by PhD-level projects, personal research and participation in EU-funded projects. The themes and issues of recent and current research are diverse, reflecting the personal interests of individual researchers and the supervisors and the occasional funding opportunities from various sources.

Although e.g. the disciplinary research councils, Irish Research Council for Science Engineering and Technology (IRCSET) and Irish Research Council for Humanities and Social Sciences (IRCHSS), have also supported a small number of research projects on science in society or with science in society elements the overall funding opportunities for science in society research through programs focused on broader areas of natural sciences and engineering or humanities and social sciences are sparse and sporadic.⁹²

For this section of the PERARES country report Senior level managers from the key research funders in Ireland were interviewed. Four representatives from the Higher Education Authority (HEA) and Irish Research Council (IRC) were interviewed to cover the range of research they fund. Interviews were conducted with representatives from the Department of Foreign

⁹² http://www.masis.eu/files/reports/updated_fall_2011/MASIS_Ireland_report_updated.pdf

Affairs and from the Department of Children and Youth Affairs, both of whom commission research, and with independent research funder Atlantic Philanthropies, which has funded academic research in Ireland. An interview was also carried out with Forfas, the policy advisory board for enterprise, trade, science, technology and innovation. Science Foundation Ireland (SFI) and the Health Research Board (HRB) were also interviewed.

Policy background

At the beginning of the 1990s, spending on basic research in the Irish higher education system was about 11% of the European Union norm.⁹³ A partnership was developed between the Irish Government and private philanthropic funder Atlantic Philanthropies, brokered in large part by the HEA, to 'expand the capacity of Irish higher education institutions to undertake basic research of international standard.'⁹⁴ From the outset one of the three assessment criteria was 'the impact of the proposed research on teaching and learning at the institution'⁹⁵ although wider societal impact was not directly addressed. From a relatively low base, the research infrastructure developed rapidly, due to significant investment in both physical and human resources. In addition there were 'many years of support from the European Union through Structural Funds and access to European research programmes'.⁹⁶ This strategy was successful, and Ireland moved into the top 20 of the most cited countries in the world in 2008, having been ranked 36th just five years before.⁹⁷ In 2009, research and development expenditure was 1.77% of GDP, up from 1.29% in 2007.⁹⁸ Whilst in part this reflects a drop in GDP over this time period, in real terms research funding was maintained during a very difficult period in the Irish economy. However there have been concerns that research funding will decline over the next five years in real terms and that Ireland must increase its focus on other funding sources, particularly the European Commission's Horizon 2020.⁹⁹

Government investment in research infrastructure was largely undertaken through their *Programme for Research in Third Level Institutions* (PRTL), which was established in 1998 as 'an investment vehicle to bring about a permanent transformation in the research environ-

⁹³ Rhodes, F and Healy, R (2006) 'Investment in Knowledge: A Case Study of a Philanthropy's Partnership with Government' *Journal of the Institute of Public Administration in Ireland* vol 54 no 2 p64

⁹⁴ Ibid., p.68

⁹⁵ Ibid., p.69

⁹⁶ Hunt (2011) *The National Strategy for Higher Education to 2030*.

http://www.hea.ie/files/files/DES_Higher_Ed_Main_Report.pdf p.7

⁹⁷ Ibid., p.65

⁹⁸ The World Bank (2012) 'Research and Development Expenditure (% of GDP).

http://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?order=wbapi_data_value_2009+wbapi_data_value&sort=asc Accessed 21/8/12

⁹⁹ O'Carroll, C., 'We must act to secure research funding' *Irish Times* 22/12/11

<http://www.irishtimes.com/newspaper/sciencetoday/2011/1222/1224309376389.html> Accessed 21/8/12

ment and culture in Ireland.¹⁰⁰ This has had a transformative effect and 'ushered in a new era for research and innovation and fundamentally altered the research landscape in higher education.'¹⁰¹ To date, €1.2bn has been disbursed to HEIs across Ireland, with almost two thirds of it being spent on physical infrastructure projects.¹⁰² This funding stream will continue until 2015.

Another relevant stream of government funding for research has been the Strategic Innovation Fund (SIF), administered by the HEA, which is directed towards support for innovation in HEIs.¹⁰³ In 2008, cycle 1 offered €42m and in 2008, cycle 2 funded to the tune of €97m.¹⁰⁴ In the second round, €20.7 million was allocated for proposals seeking to extend the research capacity of the sector, in line with the Strategy for Science Technology and Innovation.¹⁰⁵ Whilst there is no direct mention of engagement within this funding stream, it has funded several initiatives aimed at supporting engagement, such as Campus Engage and REAP, which will be discussed in more detail under 'Resources for Public Engagement.'

The *National Strategy for Higher Education to 2030* was published in January 2011. This offers a blueprint for the way ahead for higher education in the Republic of Ireland. It deals with all aspects of higher education, referring to engagement as one of the three core roles of higher education alongside teaching and research.¹⁰⁶ The definition of engagement is broad 'engagement means taking on civic responsibilities and cooperating with the needs of the community that sustains higher education - including business, the wider education system, and the community and voluntary sector.'¹⁰⁷ It sees engagement as wide ranging and encompassing a full commitment by HEIs to engage at local, national and international level.¹⁰⁸ However most of the engagement referred to in the strategy is either technology transfer or engagement through teaching and learning and access initiatives. For example, mechanisms to promote the movement of staff between HE, enterprise and the public sector 'such movement would benefit both sides: industry and the public sector would benefit from the new knowledge and theoretical understanding developed in the education and research system, education would benefit from the practical know-how and constraints experiences by the enterprise and public sectors.'¹⁰⁹ There is recognition that engagement on research issues may also be important 'research in higher education has an important role in

¹⁰⁰ HEA (2006) 'The Programme for Research in Third Level Institutions: Transforming the Irish Research Landscape' <http://www.heai.ie/files/files/file/archive/research/PRTL/HEA%20PRTL%20Directory%20-%20Section%201.pdf> Accessed 18/7/12

¹⁰¹ HEA (2011) *Transformations: How Research is Changing Ireland*. HEA 2011: 5

¹⁰² <http://www.heai.ie/en/prtli/> Accessed 18/7/12

¹⁰³ HEA (2012) Strategic Innovation Fund <http://www.heai.ie/en/sif/> Accessed 20/7/12

¹⁰⁴ Ibid

¹⁰⁵ Ibid

¹⁰⁶ Hunt (2011) Op. Cit. p.5

¹⁰⁷ Ibid., p.74

¹⁰⁸ Ibid., p. 77

¹⁰⁹ Ibid., p. 69

informing public opinion. In this respect, the higher education institutions are a trusted source of wisdom and independent commentary'.¹¹⁰ It recommended that research should have a single lead responsible agency and that government funding mechanisms for research should be coherent with all of the other government funding streams for HE. It also recommended that research should focus on identified priority opportunities for industry in Ireland.¹¹¹ However research is by and large treated separately from engagement and the focus is principally, although not exclusively, on economic growth.

This economic focus was further emphasised by the Research Prioritisation Group who produced their report in November 2011. The group was asked by government to identify priority areas around which future investment in publicly-performed research should be based in the areas of science, technology and innovation. 'These priority areas should deliver sustainable economic return through their contribution to enterprise development, employment growth, job retention and tangible improvements in quality of life.'¹¹² Fourteen priority areas were identified, which 'in most instances ...already connect to established European and global research agendas.'¹¹³ These are:¹¹⁴

- Future Networks and Communication
- Data Analytics, Management, Security and Privacy
- Digital Platforms, Content and Applications
- Connected Health and Independent Living
- Medical Devices
- Diagnostics
- Therapeutics – Synthesis, Formulation, Processing and Drug Delivery
- Food for Health
- Sustainable Food Production and Processing
- Marine Renewable Energy
- Smart Grids and Smart Cities
- Manufacturing Competitiveness
- Processing Technologies and Novel Materials

¹¹⁰ Ibid., p. 64

¹¹¹ Ibid., p. 73

¹¹² Forfas (2011) *Report of the Research Prioritisation Steering Group* http://www.forfas.ie/media/ffs20120301-Research_Prioritisation_Exercise_Report.pdf Accessed 20/7/12 p.7

¹¹³ Ibid., p.9

¹¹⁴ Ibid., p.10-12

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It is anticipated that the outcomes from this report will flow through to research funders and will help them define their priority areas for research funding. A prioritization action group has also been set up to oversee implementation of the actions recommended by this group. It will assist in targeting 'the majority of the Government's core €500million budget that the State spends on scientific research every year on areas with the greatest potential for economic return.'¹¹⁵ There is some reference to engagement but this is largely with industry rather than with CSOs.

Consultation exercises were undertaken for both of these reports, which will define the landscape of higher education and research for some years to come. The *National Strategy for Higher Education* consulted with 'across education, enterprise, trade unions and wider interest groups' receiving over 100 responses¹¹⁶ whilst the Research Prioritisation Steering Group based their recommendations on 'our deliberations, a number of significant studies undertaken by Forfas and direct input from the research community, the enterprise sector and research funding Departments and agencies.'¹¹⁷ There were no references in either of these reports to inputs from CSOs, with the exception of trade unions.

Research funding structures

Whilst research funding operates in a number of ways in Ireland, it is principally funnelled through the Department of Education and Skills and the Department of Jobs, Enterprise and Innovation. The Higher Education Authority (HEA) and the recently established Irish Research Council (IRC) are funded by the Department of Education and Skills whilst Science Foundation Ireland (SFI) and the research policy body Forfas are funded by the Department of Jobs, Enterprise and Innovation. Other organisations which fund research include the Health Research Board (HRB), and the Environmental Protection Agency who are funded under their respective departmental budgets.

As this report was being undertaken, structures to support research in Ireland were experiencing major changes, in large part due to 'economic difficulties and need to reinvent public services.'¹¹⁸ The Higher Education Authority was 'moving from a role that was focused mainly on funding and managing existing activity...to one of leading change and encouraging

¹¹⁵ Irish Government News Service (2012) Government's plan to target core €500million research budget at turning good ideas into good jobs
<http://www.merriestreet.ie/index.php/2012/03/governments-plan-to-target-core-e500million-research-budget-at-turning-good-ideas-into-good-jobs/> Accessed 20/7/12

¹¹⁶ Hunt (2011) Op. Cit. p.3

¹¹⁷ Hunt (2011) Op. Cit. p.7

¹¹⁸ HEA (2012) 'Strategic Plan 2012-2016' HEA. P.4

innovation in and across a whole coherent system of Higher Education.¹¹⁹ The Irish Research Council for Science, Engineering and Technology (IRCSET) and the Irish Research Council for Humanities and Social Sciences (IRCHSS) merged in April 2012 to form the new Irish Research Council (IRC)¹²⁰ which will operate under the aegis of the HEA¹²¹. At the time of writing, the budget of the new IRC was unclear, although interviewees stated that the combined budget of the previous two research councils was €31m. There was considerable crossover of staff between the HEA and IRC, for example, the Head of Research Programmes and Capital Programmes at the HEA was also acting as Interim Director of the IRC at the time of writing, and other interviewees were also similarly carrying dual roles. In the Irish context, the IRC largely acts as a research broker, often administering funding calls which have already been set by other government agencies. In interview, representatives talked about research calls being defined within government departments – for example the Department of Children and Youth Affairs will go to the IRC with a clear idea of the research they would like to see done and the IRC puts out the funding call, assembles a group of experts to act as peer reviewers, and administers the funding stream. However it has little input into the content of the research being commissioned. As one interviewee stated, Departments set the policy and it is implemented by the research agencies, who have varying degrees of control over this process. Where broader funding streams do exist, for example PRTL, there are open calls based on research excellence. The Research Prioritisation Exercise is expected to provide the context for the focus of much of this funding in years to come.

Science Foundation Ireland (SFI) is a state agency which has an annual budget of €150m for research,¹²² 95% of which is directed towards HEIs. 'SFI invests in academic researchers and research teams who are most likely to generate new knowledge, leading edge technologies and competitive enterprises in the fields of science and engineering underpinning three areas: Biotechnology, Information & Communications Technology (ICT) and Sustainable Energy & Energy Efficient Technologies (Energy)'.¹²³ It uses international peer review to fund far-reaching, high impact research. Its main policy focus until recently had been set by the Technology Foresight Exercise which took place in 1998 and resulted in the setting up of SFI.¹²⁴ In interview, the agency stated that going forward, the Research Prioritisation Exercise will be used to focus research activities and will inform their new strategy which is due to be published later this year. Engagement will be one of the four main pillars of this strategy. The

¹¹⁹ HEA (2012) *Op. Cit.* P.4

¹²⁰ O'Carroll, C., (2012) 'New Body Sees Value of Research' Irish Times 26 April 2012.
<http://www.irishtimes.com/newspaper/sciencetoday/2012/0426/1224315190526.html> Accessed 25/5/12

¹²¹ HEA (2012) *Op. Cit.* p.20

¹²² RTE News (2011) 'Over €150m in Irish Research Grants Last Year' RTE News 8 September 2011.
<http://www.rte.ie/news/2011/0908/science.html> Accessed 23/7/12

¹²³ Science Foundation Ireland (2012). *What We Do*. Available <http://www.sfi.ie/about/what-we-do/> Accessed 23/7/12

¹²⁴ Science Foundation Ireland (2012) *History*. Available <http://www.sfi.ie/about/history/> Accessed 23/7/12

new CEO of SFI has a particular interest in engagement and the organisation is currently looking at models and ways to do this more effectively. They were especially interested in models of engagement around the assessment of research proposals, and encouraging proposals to specify the business and societal impact they will have. They were keen to see more engagement from academics, for example encouraging the development of more transferable skills as part of the PhD process.

The Health Research Board (HRB) is a state agency which has a budget of €40m which it uses 'to achieve the highest quality health research and developing the right skills, conditions and capacity in the Irish health system, in order to accelerate the translation of research discoveries into real benefits for people'.¹²⁵ One of their key goals is to 'enhance[d] partnerships between the health system, academia and industry, mutually beneficial, contributing to the 'smart economy' and supporting commercialisation'.¹²⁶ They also have a goal of 'knowledge transfer initiatives that are leading the way in turning research evidence into policy and practice'.¹²⁷

Finally, Atlantic Philanthropies has continued to fund research 'to create new knowledge; strengthen the voluntary sector; enrich the lives of older people; improve services and public policy for children and young people; improve palliative care; and promote and protect human rights'.¹²⁸ They consider proposals by invitation only.¹²⁹ They fund both academic institutions and voluntary sector organisations to carry out research. In addition they have encouraged the development of networks across universities, for example the Centre for Aging Research and Development in Ireland (CARDI) which was 'established to provide a mechanism for greater collaboration among age researchers, for wider dissemination of ageing research information and to advance a research agenda relevant to the needs of older people in Ireland (North and South)'.¹³⁰ CARDI's steering group 'approve[s] CARDI's vision, mission, annual objectives, and contribute[s] expertise and specialist knowledge as appropriate'.¹³¹ As a condition of funding, Atlantic Philanthropies mandated that this relatively small

¹²⁵ Health Research Board (2012). *Strategic Business Plan*. Dublin: HRB. 1. Available http://www.hrb.ie/uploads/tx_hrbpublications/HRB_Strategy_2010-2014_01.pdf. Accessed 17/7/12

¹²⁶ Ibid

¹²⁷ Ibid

¹²⁸ Atlantic Philanthropies (2012). *Regions: Republic of Ireland*. Available <http://www.atlanticphilanthropies.org/region/republic-ireland> Accessed 17/7/12

¹²⁹ Atlantic Philanthropies (2012) *Grants Funding Policy*. Available <http://www.atlanticphilanthropies.org/funding-policy>. Accessed 17/7/12

¹³⁰ CARDI (2012) *About Us*. Available <http://www.cardi.ie/aboutus> Accessed 17/7/12

¹³¹ CARDI (2012). *Strategic Plan 2008-2011*. Available http://www.cardi.ie/userfiles/Master_cardi_report_draft_3_low.pdf Accessed 20/7/12

group includes representatives from CSOs from both the North and South of Ireland (Age NI and Age Action Ireland) who work to ‘enhance and improve the lives of older people.’¹³²

Resources to support public engagement

Whilst there is a strategic context in place, there are currently no resources to directly support public engagement. However the HEA stated in interview that they are currently examining options to enhance engagement with the community and with enterprise. In this, they are hoping to build on models of good practice which were established under SIF funding, in particular *Roadmap for Employment – Academic Partnerships* (REAP) and *Campus Engage*. REAP focused on research, development and validation of a Higher Education- Industry Partnership Model and Roadmap, which would take account of existing engagements and brings them together in a single partnership framework.¹³³ Campus Engage was a network established to promote civic engagement activities in Irish HE. Five partner HEIs sought to ‘to strengthen the relationship between higher education and the wider society, through promoting civic engagement activities in higher education in Ireland and facilitating the sharing of knowledge and resources between academic and civic communities.’¹³⁴ Currently the HEA are closely examining the model of the Beacons for Public Engagement¹³⁵ which was put in place by Research Councils UK in 2008. They are also considering a National Platform for Public Engagement which would encompass engagement across a range of different stakeholders, with businesses, employers and community partners.¹³⁶

Key findings

The following key findings are drawn from interview data except where otherwise stated.

Experiences of incorporating the needs of CSOs in research funding streams

With a few exceptions, there was little experience of incorporating the needs of CSOs into funding streams. There was however agreement across all of the interviewees that demonstrating impact and value for money was a definite focus for research activities. Most funders consult with particular publics, for example the academic community, industry, and

¹³² Age NI (2012). *About us*. Available <http://www.ageuk.org.uk/northern-ireland/about-us/who-we-are/> Accessed 20/7/12

¹³³ REAP (2012). *The REAP Project*. Available <http://reap.ie/site/about-reap/the-reap-project/> Accessed 20/7/2012

¹³⁴ Campus Engage (2012). *Campus Engage*. Available <http://www.campusengage.ie/site/view/27/> Accessed 20/7/2012

¹³⁵ NCCPE (2012). *The Beacons Project*. Available <https://www.publicengagement.ac.uk/about/beacons> Accessed 20/7/2012

¹³⁶ Interview with HEA

practitioners or professionals working in a particular field (the latter was particularly the case within the health field). There was a tacit understanding amongst interviewees that these publics represented the views of the wider public, at least to some degree. One interviewee also pointed out that research funding calls in some cases have been developed by political representatives in response to the expressed needs of their constituents. By European standards, this type of engagement is relatively early stage.

The Health Research Board (HRB) offered an interesting example of co-funding with the Medical Research Charities Group (MRCG), where €1m of the HRB's annual €40m budget was ringfenced and was matched by an equal amount from the MRCG. AS MRCG states, this not only ensures that patient focused research is conducted that otherwise might not be considered under HRB funding streams but 'the partnership with the HRB is essential to build capacity in Irish research charities to ensure that all elements of their research processes are to the highest standards of best international practices. The scheme is also important as a way of encouraging less experienced researchers gain appropriate and supported experience in a structured scheme.'¹³⁷ To date, four calls for funding have been approved and 69 projects, have been supported through this scheme.¹³⁸ Apart from this, HRB funding focused mainly on clinicians.

The newly established Irish Research Council offers CSOs the opportunity to become involved in research programmes through some funding schemes, although they identified in interview that to date, CSOs had not taken up this opportunity. For example, their Enterprise Partnership Scheme links with private enterprise and eligible public bodies to award post-graduate and postdoctoral fellowships to promising researchers.¹³⁹ The Irish Research Council contributes two-thirds of the cost of any scholarships awarded.¹⁴⁰ Whilst the partners listed currently are drawn from industry, in interview the IRC indicated that they would also consider applications from emerging researchers who wanted to work with relevant CSOs and public sector bodies. In addition, the IRC is currently offering funding to support researchers to apply for FP7 funding, both at partner and at co-ordinator level. The goal is to support people who have never made such a funding proposal before to get to a point where they have a well-defined proposal ready for further development.¹⁴¹ There are opportunity for academics who wish to co-ordinate projects with CSOs to apply for this funding

¹³⁷ Medical Research Charities Group (2012). *Joint Funding Scheme*. Available http://www.mrcg.ie/go/medical_research_funding/joint_funding_scheme Accessed 17/7/12

¹³⁸ Ibid

¹³⁹ Irish Research Council (2012) Enterprise Partnership Scheme. Available <http://www.research.ie/scheme/enterprise-partnership-scheme> Accessed 01/08/12

¹⁴⁰ Irish Research Council (2012). Available http://www.research.ie/sites/default/files/interested_companies.pdf Accessed 01/08/12

¹⁴¹ Irish Research Council (2012) Call for Expression of Interest for Researchers New to FP7 Support Package Available <http://www.research.ie/event/2012-05-21/call-expression-interest-researchers-new-fp7-support-package> Accessed 1/8/12

and it is often the case that EC funding calls seek broad consortia of partners. As *FP7 in Brief* states: 'The EU policies of developing research for the global knowledge based economy focus increasingly on collaborative research, both within the EU and with external research partners'.¹⁴²

The HEA manages a funding stream on behalf of, and in consultation with, Irish Aid, the Irish Government's programme of assistance to developing countries. This was mentioned as a model of good practice by several interviewees and one which might bear further examination for those who are currently working on ways to implement public engagement within their own funding streams. The *Programme of Strategic Cooperation* (PSC) promotes linkages and cooperation between higher education and research institutions in countries supported by Irish Aid, focusing on hunger, sustainable agriculture, nutrition, health and education.^[1] The goal is to support Irish Aid's mission to reduce poverty through a programme of cooperation with HEIs, north and south.^[2] The Programme was developed following wide consultation, including with civil society organisations in Ireland. A key element of this support in the first two rounds was funding to Irish HEIs to capacity build and develop relationships with both HEIs and NGOs in countries benefiting from Irish Aid. This has been strengthened in the current third round with a further €4.8m allocated to the programme in May 2012 supporting areas of work on hunger, health, HIV/AIDS and education.^[3] Themes come from development priorities which are established partly based on community identified needs. As proposals are put together, further consultation is undertaken. Applications are assessed by an international panel of experts which includes both academics and practitioners, some of whom have worked with civil society organisations. Perspectives from CSOs in Ireland and local communities in the partner countries are considered vital given the focus of the funding stream on delivering development outcomes for poor people.

Another model of good practice for public engagement more broadly exists in the Department of Children and Youth Affairs which is guided by Article 12 of the United Nations Convention on the Rights of the Child in ensuring that children and young people under the age of 18 have a voice in the design, delivery and monitoring of services and policies that affect their lives, at national and local level. Their goal is to ensure that in working in partnership with children and young people, they understand better the needs and interests of young

¹⁴² European Commission 'FP7 in Brief' http://ec.europa.eu/research/fp7/pdf/fp7-inbrief_en.pdf Accessed 24/8/12

^[1] HEA (2012). Programme of Strategic Cooperation between Irish Aid and Higher Education and Research Institutes. Available <http://www.heai.ie/en/node/120> Accessed 20/7/12

^[2] Irish Aid (2012) *Programme of Strategic Cooperation between Irish Aid and Higher Education and Research Institutes 2007-2011*. Available <http://www.heai.ie/en/Irish-Aid-Programme-of-Strategic-Co-Operation>. Accessed 17/7/12

^[3] *Ibid*

people and are better able to develop policies and practices that are more relevant and likely to be more effective.¹⁴³

They have developed effective structures for children's participation in decision-making, conducting consultations and dialogues with children and young people, development of evidence-based policy in keeping with national and international best practice and partnering with statutory and non-government organisations. These include a National Youth Parliament and local Youth Councils as well as a range of other mechanisms and have developed participation guidelines.¹⁴⁴ This model could well be utilized to engage a broader range of publics.

Several interviewees felt that currently public engagement was effectively disincentivised for academics since it did not appear on promotions criteria and therefore had little value attached to it, although there was a suggestion that Institutes for Technology were better able to integrate public engagement into their work. The HEA indicated in interview that consideration was being given to incentives and disincentives in terms of encouraging HEIs to engage more fully. At the time of writing, a paper was being prepared examining options for enhancing engagement, although it was not yet in the public domain. However it is clear that if engagement is to be valued, it should feature as an institutional priority and should be reflected in promotions criteria for academics.

Whilst there was a lot of goodwill for engaging with CSOs, and some models of good practice existed, as discussed above, it should be noted that the overall picture is of very limited engagement with CSOs.

Budget for public engagement and current calls open

There are no budgets directly allocated to this area of work.

CSO Participation at a policy level

To date, there has been little direct participation outside of the funding streams mentioned above. Whilst there has been some input from wider society in the form of subject specialists and academics this is relatively low level. CSOs are in general not participating at any level in developing research funding streams or in making proposals to them. One senior interviewee referred to government being very supportive of much closer engagement across society. Another stated that CSOs need to start asking about research and asking to

¹⁴³ Department of Children and Youth Affairs (2012) *Children and Youth Participation*. Available <http://www.dcy.gov.ie/viewdoc.asp?fn=%2Fdocuments%2FChildYouthParticipation%2Faboutus.htm&mn=chip&nID=1> Accessed 2/8/12

¹⁴⁴ *Ibid*

input into research streams and themes, and need to form their own research partnerships and develop a vision for their own priorities in particular research areas. There were concerns raised by funders that the CSO sector is fragmented and it can be difficult to know who to work with and how best to work with them. This is an issue that Atlantic Philanthropies has addressed within their research funding priority areas and there may be some learning from this process for other funders. Another interviewee suggested that there is a lack of capacity within CSOs to become involved in research issues – both time capacity and a lack of expertise. Currently CSOs were unlikely to have the capacity to take an overview and work with other CSO partners to develop research agendas. Most interviewees reported a lack of lobbying except in the health field. And even in the health field, lobbying was unlikely to have any impact because priorities were already set at European and National level. This is certainly likely to be the case for small scale CSOs although some larger scale CSOs are likely to have research teams in place. However having the time capacity to engage is another issue, and organisations are most likely to engage where issues are directly relevant to them.

Impact on CSOs

Some funding streams have had direct and positive effects on CSOs, for example Irish Aid's scheme, although for some, it is too early to tell what these might be. It is outside the scope of this research to work with CSOs to understand what the impact on them has been.

Conclusions

Currently in Ireland, very few formal mechanisms exist for CSOs to interact with academic funding agencies. Research funding policy does refer to engagement and the *Strategy for Higher Education to 2030* provides a useful context in which civic engagement can take place. However to date this element of the strategy has not been implemented. There is little evidence of consultation with CSOs at the level of developing research policy or developing research grant applications. For example the only CSOs listed in consultations for both the *Research Prioritisation Report* and the *National Strategy For Higher Education to 2030* are trade unions. In addition, funding agencies themselves often have clear remits which can make it difficult for such interactions to bear results.

Until recently, public engagement with research has been largely interpreted as either making the public aware of the outcomes of research or carrying out research to meet the needs of the public as specified by academics and policy makers. It was clear in interview that research funders were aware that this was not sufficient. Moving this understanding into funding council policy and strategy and into funding streams will be vital for Ireland if it is to reach European Commission standards of engagement with research. Following the Ljubljana Process, in December 2008 the EU adopted the *European Research Area Vision 2020*. This strategy clearly states that the ERA is firmly rooted in society and responsive to its

needs, and that it builds on mutual trust and continuous dialogue between society and the science community.¹⁴⁵ Irish research still has quite a distance to travel to get to this point.

Several interviewees identified the need for leadership in this area. Across all of the organisations interviewed, there was a commitment to research partnerships and an interest in examining and spreading out models of good practice. However this will require agreement at the highest levels. Turning commitment into practice requires strong leadership coupled with structures, support and funding to enable engagement. Funders agreed that this will involve a fundamental shift in academic culture but to date have not agreed how this will be achieved. The policy context exists to underpin fundamental change, the question is how this change will be operationalised.

¹⁴⁵ European Commission (2012) Responsible Governance <http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1251> Accessed 20/7/12

6. Experiences of Incorporating the Needs of CSOs in Research Funding in the Netherlands

The MASIS report states for the Netherlands¹⁴⁶: Dutch research agenda setting was not very successful. For the first time it was started to really redistribute re-search funding in terms of priority areas, the so-called 'top areas'. A main challenge here is how research agenda setting should be organized, in a way that avoids agenda setting being dominated by (industrial) interest groups that try to functionalise public research for their industrial needs only. For balanced agenda setting this is a real problem, as innovation and economic growth should be objectives in science policy, but not the only objectives. A healthy research system should be able to perform its many functions, and innovation is only one of them.

Citizen involvement is taken broadly here, in the sense of representation of societal interests in priority setting. Until recently, a system of *area councils* (*sectorraden*) existed, in which representatives from science, government and society (among others civic society organizations) discussed research priorities and research agenda from the perspective of societal challenges.

A second tendency is to include representatives of society in boards of research funding organisations. Where traditionally these boards consisted of scientists only, more recently boards are extended with (a) representative(s) of 'society'. This is also the case for the dominant research funder (NWO), whose activities in the meantime have changed from funding only basic and curiosity driven research to the funding of a large variety of programs, also programs for strategic and thematic research. Increasingly, in many research fields coordinating bodies play a role in agenda setting and coordination of research. And also here, one finds increasingly 'representatives of society'. Representatives from the business sector are dominating though.

All in all citizen or CSO-initiated activities with political effects on science policy are scarce. Questions arise about to what extent societal groups are effectively included in upstream engagement and early decision making.

¹⁴⁶ http://www.masis.eu/files/reports/updated_fall_2011/MASIS_Netherlands_report_updated.pdf

The intention of this report is to provide a good general overview of the SIS situation in the Netherlands, including public engagement in science, different models and use of scientific advice and expertise for policy-making, activities related to assessment and ethical issues of science and technology, SIS research activities and scientific culture as well as trends, policies, actors and activities. The report will be updated twice during 2011.

For the following section of the PERARES country report interviewees came from governmental and non-governmental organizations and institutes¹⁴⁷.

Policy Background and Research Funding Structures

The Dutch government presented in 2011 the political programme "Quality through Diversity. Strategic Agenda for Higher Education, Research and Science" (Kwaliteit in verscheidenheid. Strategische Agenda Hoger Onderwijs, Onderzoek en Wetenschap)¹⁴⁸ and sees the future of science as follows: Scientific quality and efficiency are the most important criteria for the establishment of research priorities. Within this focus science is working closely with companies in the Dutch top sectors and with civil society organizations to find answers to the great challenges of this century.

The research in the Netherlands in 2011 had a total volume of € 12,1 billion¹⁴⁹. The major financiers therefore are companies. They cover a little less than half of the financing of the total Dutch research budget. They mainly finance their own research, but also research at public institutions (universities and semi-public institutions). The government is the second major financier with just over a third. Within the government, the Minister of Education, Culture and Science is the coordinating minister for research policy.

Besides these two financiers approximately 15% of research funds come from abroad, from subsidy funds of public institutions (universities and research institutions) and from foundations, which receive their funding through donations or lottery revenues.

¹⁴⁷ Interviewpartners:

- Athena Institute, VU University Amsterdam,
- Science System Assessment of Rathenau Institute
- Kennisklik, Universiteit Tilburg
- Netherlands Organisation for Health Research and Development (ZonMw)
- KENNIScoCREATIE
- Ministerie van Onderwijs, Cultuur en Wetenschap (Ministry of Education, Culture and Research)
- Koningin Willemmina Fonds, Dutch Cancer Society
- Stichting DOEN
- Responsible Innovation (MVI), NWO

¹⁴⁸ http://www.vno-ncw.nl/SiteCollectionDocuments/Meer%20informatie/kwaliteit_in_verscheidenheid-strategische_agenda_hoger_onderwijs_onderzoek_wetenschap_1juli_2011.pdf

¹⁴⁹ Het Nederlandse wetenschapssysteem – institutioneel overzicht (2012). Ministerie van Onderwijs, Cultuur en Wetenschap (p. 19) <http://www.rijksoverheid.nl/documenten-en-publicaties/brochures/2012/04/16/het-nederlandse-wetenschapssysteem-institutioneel-overzicht-april-2012.html>

Governmental Funding

One conclusion in the overview of 2012 on the research and development expenditures (R&D) of the central government is¹⁵⁰: Direct public expenditure will decrease in the coming years, both in absolute and relative terms. This decrease is a consequence of the policy of the government, which attempts to shift from direct to indirect public spending and put the focus on the R&D and innovation activities. Direct public funding for R&D decreases from 2011 to 2017 by 13.7% from € 5.1 to € 4.4 billion (minus € 702 million). An important reason for this is that the innovation programmes of the Ministry and the projects of the Fund for strengthening the economic structure (FES) expire in the various ministries and won't be renewed. In addition, some temporary measures, established for the years 2009 and 2010 under the financial crisis, have been completed. Even if you factored these limited measures of crisis management, recorded the entire research funding declined € 530 million between 2010 and 2016.

The Ministry of Education, Culture and Science has a broad political-administrative and financial responsibility for public research in the Netherlands. The largest part of the budget goes to the institutional or core funding. Part of the government responsibilities for research funding in the Netherlands is carried out by intermediary organizations such as Netherlands Organisation for Scientific Research (NWO).¹⁵¹

Netherlands Organisation for Scientific Research (NWO)

The Netherlands Organisation for Scientific Research (NWO) is the national research council and with a budget of € 700 million per year the main funder of research in the Netherlands.¹⁵² NWO falls under the responsibility of the Dutch Ministry of Education, Culture and Science and funds the research of more than 5.000 scientists. It is an umbrella organisation of various organisational units: science divisions, foundations, institutes and temporary task-forces for a specific, often multidisciplinary, research field. Research is financed both at institutes of NWO and at the Dutch universities.

NWO allocates its budgets across the science divisions with their own divisional board. Usually researchers employed at a Dutch university or a research institute recognised by NWO can apply for research funding. The funding instruments cover the entire spectrum of fundamental and applied research. Knowledge utilisation (societal and scientific applicability of the results) is increasingly a criterion in the assessment of funding instruments.

¹⁵⁰ <http://www.rathenau.nl/publicaties/publicatie/totale-onderzoek-financiering-tof-2011-2017.html> (p. 10)

¹⁵¹ Het Nederlandse wetenschapssysteem – institutioneel overzicht (2012). Ministerie van Onderwijs, Cultuur en Wetenschap (p. 18) <http://www.rijksoverheid.nl/documenten-en-publicaties/brochures/2012/04/16/het-nederlandse-wetenschapssysteem-institutioneel-overzicht-april-2012.html>

¹⁵² <http://www.nwo.nl/en/about-nwo/what+does+nwo+do>

Responsible Innovation Programme (MVI)

One of the NWO programmes is called 'Responsible Innovation programme' (MVI). It deserves our attention as it funds and encourages research in which the ethical and social aspects of new technology are considered right from the design phase. This shall prevent expensive adjustments having to be made in retrospect or society rejecting the new technology.¹⁵³ One of the pillars is the *social relevance*: a civil society panel representing the business community and NGOs evaluates the research proposals for their social relevance.

The thematic programme contributes to responsible innovation by increasing the scope and depth of research into societal and ethical aspects of science and technology. It focuses on proactive research into the ethical and societal aspects of technological development projects. Interaction between research into humanities, technological and social sciences is one of the programme's emphases. The valorisation of the research will receive a great deal of attention, both at the level of the programme and at the level of the individual projects.

Public parties (ministries) and scientists laid the foundation for the programme. NWO provides the programme MVI an annual budget of 1,8 million Euros for funding research available.

Within the context of the MVI programme, the call for proposals focuses on short-term research projects that tie in closely with the activities (as set out in the existing innovation contracts) of the Top Sectors Energy, Life Sciences & Health, Agro & Food and Horticulture. Proposals have to be submitted by experienced researchers who hold a PhD and are employed at a Dutch university or a research institute recognised by NWO. Applicants could apply for personnel and cost of materials associated with the research and part of the budget had to be matched by a private partner. The NWO sees valorisation as an increasingly integral part in the assessment of applications for funding. Applicants have to demonstrate how they intend to reach the target group and which groups are involved. In addition, prior to the submission of the grant application the applicant has to set up a valorisation panel, consisting of the possible relevant "knowledge users" (e.g. consumers, businesses). In addition to the scientific advisory board also a societal panel reviews the grant applications.

¹⁵³ <http://www.nwo.nl/en/research-and-results/programmes/responsible+innovation>

Netherlands Organisation for Health Research and Development (ZonMw)

One of the NWO sections is the 'Medical Sciences (ZonMw)', the Netherlands Organisation for Health Research and Development¹⁵⁴. It funds health research and stimulates the use of the knowledge developed in consideration of patient participation to help improve health and healthcare in the Netherlands. Often the budget is limited and the competition is fierce. Patients and researchers need each other in order to obtain funds to make possible the research on major issues. It happens more and more that the conveyors fund only research if a patient organization is involved in the research.

Rathenau Institute¹⁵⁵

The Rathenau Institute is an autonomous organisation formally belonging to the Royal Dutch Academy of Sciences that was founded in 1986 and is funded by the Ministry of Education, Culture and Science. The Institute promotes the formation of political and public opinion on science and technology. To this end, the Institute studies the organization and development of science systems, publishes about social impact of new technologies, and organizes debates on issues and dilemmas in science and technology.

The Science System Assessment (SciSA) division is a national centre of expertise which conducts its own research and makes full use of information from other sources. This entails cooperation with other organizations, whereby there is a strong emphasis on scientific responsibility, interdisciplinarity and relevance. The programme is designed to respond to indications from the field (for what type of research is there a demand?) and from the science system itself (what are the most promising directions within scientific research?). The programme also seeks to structure cooperation between the various users of the information (parliament, ministries, research organizations): when are useful results actually put to use, and how can this process be organized most efficiently? Good relationships with the organizations within the science system are essential to ensure the availability of data and the ability to put results to effective use.

SciSA attempts to increase knowledge about the science system itself, doing so by means of innovative and applied research. This knowledge is then made available for the purposes of formulating effective science policy. The Science System Assessment programme includes fundamental, strategic and applied research.

¹⁵⁴ <http://www.zonmw.nl/en>

¹⁵⁵ <http://www.rathenau.nl/en/who-we-are/mission.html>

Charity Funds

Koningin Willemmina Fonds, the Dutch Cancer Society (KWF)¹⁵⁶

The Dutch Cancer Society, a nation-wide organisation for cancer-related work (research, information, prevention), is the one of the two largest charities in the Netherlands. The KWF is supported by donors and receives hardly any money from the government. It aims to spend 80% of its budget to finance cancer research; 20% is spent to public awareness and information, prevention and patient support programmes. The total research budget in 2011 was 44.8 million Euro.¹⁵⁷

In the Netherlands, currently many health care organizations experience with patient participation in scientific research. There is a growing interest among patients and patient organizations to talk about the content and organization of the scientific health research. This participation can be in a variety of ways and moments. One of the focus of KWF lies on patient participation in research which refers to the inclusion of the patient's perspective on scientific research¹⁵⁸, concretely, to enable patients to think along the design and implementation of research for the fight against cancer. Here patients are not meant to be the subjects of research, but partners co-equal to researchers and policymakers.

The experiences patients gained with participating in cancer research, they can use to provide relevant input to new cancer research. They are thus 'experience-experts'. 'Experience knowledge' (knowledge as a result of experience) can be seen as complementary to scientific knowledge.

KWF sees new clinical trials only when they arrive as application for grant. KWF decided to involve patients at that moment and give them an advisory role in the assessment of the grant. The pilot 'Patient Advisory Research' (PACO) started in 2011 and was established for a year. KWF aims to take the input of patients into consideration in the assessment of clinical grant applications, with the intended result of an increased involvement of patients (because they have a voice in the research) and better quality of clinical trials because patients provide input on issues such as importance of research, the patient information leaflet, tax, side effects and feasibility.

Within the research community it is increasingly clear that patients may have an important role in science. Some project leaders indicate that they will involve 'experience experts' (people, who experienced the specific subject) in the writing of their application. Socially serves the PACO as a model for universities and other funds and has worked as a positive

¹⁵⁶ <http://www.kwfkankerbestrijding.nl>

¹⁵⁷ <http://scripts.kwfkankerbestrijding.nl/bestellingen/documents/DEFJaarverslag2011LoRes.pdf> (p. 12)

¹⁵⁸ Patient participation in research <http://onderzoek.kwfkankerbestrijding.nl/patientenparticipatie-in-onderzoek/Pages/default.aspx>

incentive for patient participation in research. The way the PACO is set up is seen as professional and efficient and the knowledge of the PACO has been variously distributed and transferred. The KWF sees itself still in a learning process concerning the patient participation. The *golden path* can be different for each institution. Even for the patient the participation in the assessment process of grant applications means a learning process.

DOEN Foundation

DOEN Foundation achieves its objective through the revenues it receives from the postcode lottery, the **Friends Lottery** and the **BankGiro Lottery** and supports initiatives in the field of Culture and Cohesion and Green and Inclusive Economy. With an annually funding volume of 20 million Euro DOEN supports more than 200 initiatives by means of subsidies, loans and guarantees. These initiatives are characterised by their enterprising approach: people, organisations and enterprises that dare to take risks that are creative and innovative and thus effectively contribute to a better and cleaner world. DOEN supports both large and small initiatives such as a project, a programme or an institutional subsidy for a maximum of three years.¹⁵⁹

DOEN does not fund standalone (scientific) research. But there are projects that are carried out in collaboration with scientists, civil society organizations and citizens like within the programme 'social design'. There is e.g. a project where artists, designers and scientists work on various projects together with the elderly and young people, volunteers and employees to throw new light on loneliness and stimulate discussion.

As one funding criteria should be named that DOEN pays particular attention to initiatives in a pilot and / or start-up condition. After this phase, with DOEN as a catalyst, the initiative should be developed to be without the support of DOEN, preferably by suitable partners already in the phase involved.

Resources to Support Public Engagement

"If the Netherlands aim for a sustainable economic growth – and anyway guarantee a sustainable livelihood for themselves - then it has to be by using knowledge. Thus by using science. Babs van den Bergh, former Director of Research and Science Policy of the Ministry of Education, Culture and Science (OCW) summarizes the motivation for the Dutch ambition to belong within ten years of the top five international knowledge economies: "only knowledge can save us."

¹⁵⁹ <http://www.doen.nl/web/about-DOEN/About-the-DOEN-Foundation.htm>

Although this willingness seemed to be there, the translation into concrete activities was a quite difficult exercise. Attempts to bring both domains structurally closer together, including through Science Shops, transfer points and the establishment of sector councils, led only marginally to the desired result. The theme continued to simmer—until it (again in times of economic contraction) in the last few years a moving-up the political agenda appeared. What was called in the seventies 'social service', is now defined under the name of 'valorisation' as the third objective of the university company.

The research council NWO sees the valorisation as an increasingly integral part in the assessment of grant applications, mentions the programme secretary of MVI. As part of the valorisation agenda it was agreed that from 2010 on all universities, colleges and other research institutions had to focus systematically on valorisation during their quality assurance systems. Valorisation is defined as making available of appropriate knowledge for new products, processes and services. This is one aspect of social relevance.

The perceived tension between academic excellence and social relevance remains. Despite the attention to quality control and the promotion of scientific research, only very little progress has been made. 'Vagueness' it was called in 1979. "There will be very little input on the part of society in terms of the choice of subjects in university research. This is an example for the current problematic relationship between higher education and society", the Board wrote for Science Policy 1979. "The contribution of university research to solve problems in the society is too small."¹⁶⁰

If research aims to have social influence, then there has to be a form of interaction between the research groups and the social interest groups. The interactions can take place in the formulation of the research agenda during the process of research itself and at the end when the results are discussed with the stakeholders. These productive interactions are important to have a short-or long-term social impact.¹⁶¹

The interlocutors assess the attitude of the government and science to community based research (CBR) differently. The staff from the Ministry of Education stated that there are no explicit funding mechanisms that promote CBR. At government level the participatory approach to research would hardly play a role. This kind of approach is more likely at the sectoral level, such as in the area of nano-research or when it comes to the participation of business.

The government currently places in the area of science and research the emphasis on concepts such as "valorisation" and "knowledge co-creation", said a worker at the **Rathenau Institute**. The "knowledge co-creation" is focused on the development of concrete action for

¹⁶⁰ http://www.rathenau.nl/uploads/tx_tferathenau/Alleen_kennis_kan_ons_redden.pdf (p. 3)

¹⁶¹ [Handreiking Evaluatie van maatschappelijke relevantie van wetenschappelijk onderzoekhttp://www.rathenau.nl/uploads/tx_tferathenau/ERIC_guide_01.pdf](http://www.rathenau.nl/uploads/tx_tferathenau/ERIC_guide_01.pdf) (p. 7)

social issues. Since more than a decennium universities will be encouraged to generate practical knowledge ("there must be someone waiting on the results of research").

In practice, it appears that the CBR is not always easy to implement, according the estimates of the interlocutor of **KNOWLEDGEcoCREATION**. CBR often does not fit into the structure of applied research. Moreover the primary interest of the universities is science. In addition, scientists often have their careers in mind, with publishing as one of the most important criteria so their priority is that research question and the research methods are scientifically and suitable for publications. The interlocutor of KNOWLEDGEcoCREATION points in that context to the lack of structures that would make the introduction of questions / impulses from the civil society possible and thus to influence the research agenda. Until now the way and the direction of finding scientific answers for a solution are far more determined only by the universities.

The managing director of the NWO programme Responsible Innovation describes CBR more related to the valorisation. The scientists have to document in advance of their grant applications, the target groups to be reached and the different groups of actors to be involved. For this, the researchers set up valorisation panels which also consist of representatives of civil society groups. Scientists consider the participation of these representatives as often difficult, due to the lack of structures and tools that enable integration and transmission for scientific work.

The interviewee of ZonMw describes her impression that the participation of civil society groups receives increasing attention. In healthcare, for example, patients' associations and scientists together take the initiative to influence the research agenda. Whether the investment is working well often depends on the individual scientists. It is the responsibility of the researcher to consider carefully whether an investment is appropriate and relevant. The Ministry of Health increasingly requires that patients are involved in research questions. To avoid any alibi participation', in which the researchers admit the involvement shortly before submitting a research proposal, ZonMw is currently in the process of developing evaluation criteria that enable a more accurate assessment when participation is making sense and how to ensure the quality of research questions.

The interviewee from the Athena Institute of the Free University of Amsterdam perceives the government as increasingly cautious when it comes to the promotion and facilitation of a science which enables the participation of civil society groups. The Ministry of Economy, for example, draws its major innovation programs more on the Top sectors (Energy, Life Sciences & Healthcare, Agri&Food and horticulture) and on companies. Cooperation takes place mainly with the industry, so the assessment of the interviewee of the Athena Institute. Ten years ago there were more participation and integration between science, society and technology, which can be explained with the changes of the political situation in the Netherlands. Meanwhile in the health sector as well as foundations of the health sector, there are approaches that stakeholders has to be included in the formulation of research questions.

The interlocutor of the Dutch Cancer Society (**KWF**) detects a trend in science, that the participation of social groups plays an increasing role. The Foundation supports scientists and has no explicit criterion for a CBR. In the list of foundation criteria it is formulated more generally, that participation in the applications of clinical trials can be seen as an added value/a stimulant and less as a condition. To integrate the social views into the clinical trials, the pilot project PACO ('Patients Advisory Research Committee') has been developed. The judgement of patient representatives complement scientific information/arguments. Grant applications for clinical trials are reviewed by a patient committee and a Science Advisory Board. However, it is difficult to assess whether the recommendations of these two groups have an equivalent weight for the evaluation of the application. The KWF is dependent to 100% of donations and receives no funding from the government. Therefore, the Foundation has a duty to give the society a voice that is still in the learning process.

Scientists especially want to develop knowledge that meets academic standards, to produce a good scientific publication. Sometimes it is also applicable knowledge publish able, but sometimes not.¹⁶²

The interlocutor responsible for the Science Shop-part of Kennisklik, Tilburg University, described how civil society groups who want to get a scientific answer to their question from Tilburg University need to find additional sources of funding by themselves. Since they are usually smaller, operating short-term projects, the groups don't contact larger foundations, but address the municipality or the province (administrative level between the national government and the municipalities). Since the means are also increasingly scarce, you can see a trend that the groups increasingly approach companies to request financial assistance.

Conclusions

At government level the participatory approach to research hardly play any role and there is no explicit funding mechanism that promotes CBR. This kind of approach is more likely at the sectoral level, such as in the area of nano research or when it comes to the participation of business.

"If the Netherlands aim for a sustainable economic growth – and anyway guarantee a sustainable livelihood for themselves-then it has to be by using knowledge. Thus by using science". Babs van den Bergh, former Director of Research and Science Policy of the Ministry of Education, Culture and Science (OCW) summarizes the motivation for the Dutch ambition to belong within ten years of the top five international knowledge economies: "only knowledge can save us."

¹⁶² <http://www.nwo.nl/actueel/nieuws/2012/Kennisontwikkeling+door+wetenschappers+en+beleidsmakers+samenvatting+samen+niet+simpel.html>

This quote reflects the trend in the Netherlands, where the valorisation of scientific work is playing an increasing role. The Government has the goal in mind, that 2.5% of public funding for research should be spent for valorisation. As part of the valorisation agenda it was agreed that from 2010 on all universities, colleges and other research institutions had to focus systematically on valorisation during their quality assurance systems. The perceived tension between academic excellence and social relevance remains. The Research Council NWO sees valorisation as an increasingly integral part in the assessment of applications for funding. Valorisation is universities' third aim besides education and research. At the time of writing this report, the Dutch Association of Universities VNSU is discussing the use of indicators to measure economic and societal 'valorisation'¹⁶³.

Despite the basic willingness of universities to respond to the social problems and needs, the translation into concrete activities remains quite difficult. Attempts to bring the two sides (CSOs and universities) closer to get her structurally, e.g. through Science Shops or Transfer Agents led to the desired results only marginally. Scientists refer to the involvement of civil society groups to be difficult, as CBR often do not fit into the structures of applied research.

The involvement of civil society groups can be observed especially in scientific studies and research in the health sector. Patients and researchers need each other in order to obtain funds to make possible the research on major issues. It happens more and more that the conveyors fund only research if a patient organization is involved in the research. Whether the investment is working well often depends on the individual scientists. It is the responsibility of the researcher to consider carefully whether an investment is appropriate and relevant.

Civil society groups who want to get a scientific answer from universities to their question often need to find sources of funding by themselves, if the capacity for '(almost) free' research through the Science Shops is not sufficient (e.g. because of budget reductions for Science Shops). Since the inquiries are usually smaller, short-term projects, the groups don't contact larger foundations, but the community or province (administrative level between the national government and the municipalities). Since the means are also increasingly scarce, you can see a trend that the groups increasingly approach companies.

¹⁶³ <http://vsnu.nl/valorisatie>

7. Experiences, Financing and Establishment of Community Based Research in Germany

The MASIS country report for Germany states¹⁶⁴: The German research system is divided into the following pillars with differing missions and different funding schemes:

- the system of universities and Fachhochschulen (universities of applied sciences) (funded by the states), aiming at research and education¹⁶⁵;
- the Helmholtz Association of German Research Centres¹⁶⁶ (90% federal funding, 10% from the states), dedicated to addressing grand societal challenges on political request (16 centres);
- the Leibnitz Society (50% federal and 50% state funding) with 86 thematically highly diverse institutes influential in specialised areas;
- the Max Planck Society¹⁶⁷ (50% federal and 50% state funding), aiming at excellent basic science research in natural sciences and social sciences (80 institutes);
- the Fraunhofer Society (federal funding with the obligation to a high share of additional funding from industry), dedicated to applied re-search in close cooperation with partners from industry (60 institutes).

The Deutsche Forschungsgemeinschaft (DFG, German Science Foundation)

DFG is the major funding agency and an influential actor in Germany. DFG is the self-governing organisation of science and research; therefore usually scientists from all disciplines decide upon funding measures and grants. Its main focus is to select the best research projects by scientists and academics at universities and research institutions on a competitive basis and to finance these projects.

The embedding of the participation principle in the sense of cooperation in the formulation of re-search agendas is not possible within the scope of DFG's regular process of individual support. Without any programmatic framework only individual, thematically and temporally limited research projects are funded. In this funding scheme no bodies exist that set research agendas. The DFG office selects professional peer reviewers who evaluate applications for scientific excellence, relevance and originality.

¹⁶⁴ <http://www.masis.eu/english/storage/publications/nationalreports/masisnationalreportgermany/>

¹⁶⁵ http://www.ger-net.de/kuehn/fk_uni.htm

¹⁶⁶ www.helmholtz.de

¹⁶⁷ <http://www.wgl.de>

The participation of civil society organizations could be achieved in this framework possibly by adding civil society perspectives to so far solely scientist expert opinion panels. But on a realistic short- or medium-term, however, this can hardly be seen as possibility because DFG is conceived and performed as an 'in-house' scientific funding organization.¹⁶⁸

Scientific Association Gottfried Wilhelm Leibniz

The Scientific Association Gottfried Wilhelm Leibniz (WGL) is organized as an association, which serves the purpose of promoting science and research of its 86 independent member research institutions. The Leibniz Association identifies focus areas for knowledge transfer to policy-makers, academia, business and the public. Various bodies have been set up to pursue this objective in the WGL, which are more or less involved in the consultation and determination of research agendas.¹⁶⁹

A direct participation possibility for civil society organizations related towards research agendas can only happen in the various institutions of the Leibniz Association. However, the discussion of such developments has already been initiated. An internal strategy discussion of institute directors took place, in which citizen participation in the research was discussed as well as whether in specific tasks / issues a more 'bottom-up' strategy should be pursued. In addition, it can be observed that larger research networks take care of the subject of citizen participation, for example, those that deal with the topic of biodiversity.¹⁷⁰

Due to Germany's size and federal structure, a large number of political initiatives, public debates, research projects, and communication activities relevant to Science in Society (SiS) can be found at the federal level and the level of the individual states (Länder).

Civil society organisations, some with decades of tradition, are closely watching scientific and technological progress in certain fields. They aim, on the one hand, at increasing awareness of potential risks to the individual, to society as a whole, to the environment, and to future generations. On the other, they want to initialise scientific research with stronger emphasis on societal demands. They thus postulate better opportunities for engaging themselves in determining the scientific agenda, in particular concerning science for sustainabil-

¹⁶⁸ Bergmann, M. (2013): Strukturelle und programmatische Hindernisse für eine Partizipation der Umweltverbände in der staatlichen Forschungspolitik, Studie für die *Zivilgesellschaftliche Plattform Forschungswende* im Auftrag der VDW e.V.; http://data9.blog.de/media/755/7388755_65a84169a1_d.pdf, p 20-21

¹⁶⁹ <http://www.leibniz-gemeinschaft.de/ueber-uns/>

¹⁷⁰ Bergmann, M. (2013): Strukturelle und programmatische Hindernisse für eine Partizipation der Umweltverbände in der staatlichen Forschungspolitik, Studie für die *Zivilgesellschaftliche Plattform Forschungswende* im Auftrag der VDW e.V.; http://data9.blog.de/media/755/7388755_65a84169a1_d.pdf, p 17

ity, equity, food safety, and privacy. Generally, improved possibilities of participation are an issue in Germany, also in science and technology.

Because of its tradition as representative democracy and because of its magnitude, Germany is less experienced with public engagement and priority setting compared to some other European countries. However, the situation has been changing for some years. Formalised procedures have been established, opening up more possibilities for means of direct democracy, mostly at the local and regional level, and partially making use of the Internet.

The Bundesministerium für Bildung und Forschung (BMBF, German Federal Ministry of Education and Research)

At BMBF level there are no institutionalised processes in which participation opportunities (for e.g. civil society organizations) are provided in a controlled or formalized form. To determine research needs so-called technical discussions are initiated for which thematically relevant scientific institutions and especially business representatives are invited to attend. Nevertheless CSOs could be added. But this is nowhere formally regulated and left to the discretion of the heads of unit.

For the Priority Area Social -Ecological Research (GFS) of the BMBF a strategy Advisory Board was convened, affecting the programme design and evaluating the research. This also included representatives from organizations such as the Association for the Environment and Nature Conservation Germany (BUND). But such councils don't exist in all programs and also their team composition is not regulated formally.

In March 2012, an agenda setting conference for a second phase of the GFS was organized. Invited to contribute was a wide range from the science and so-called practice partners, usually partners from business and organized civil society.¹⁷¹

With some initiatives BMBF is trying new ways with regard to participatory elements to pursue with CSOs: The "Sustainability in Science Initiative" organised a symposium "Sustainability in Science" in March 2012, which was conceived as agenda setting conference for a deeper anchoring of the "ethical principle" of sustainable development in scientific action and presented as open to anyone interested. The theme of participation was, however, discussed only peripherally.

The dialogue platform "Research Energy Revolution Forum" was attached to the BMBF initiated Academy Project "Energy Systems of Tomorrow" . The platform includes in addition to various federal departments and agencies, for example BUND, German Watch and consumer organizations. The dialogue platform has the task of bringing together existing knowledge

¹⁷¹ibid, p 9

and to evaluate the results of the Academy project. For composition of the dialogue platform can be spoken of adequate participation of all social groups. For its composition the dialogue platform can be seen as forum with adequate participation of all social groups.

As part of the funding programme "Social -Ecological Research" 33 individual projects are promoted from 2013. A supporting research on "Scientific coordination" of these projects also includes the transfer of knowledge between research and practice as well as instruments and methods of successful participation.¹⁷²

The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and its departmental research institutions

In research projects, which UBA (the Federal Environment Agency as a research institution of BMU commissions practice partners, experts from the social, administrative or economic environment of the object under investigation, are often involved. Here, however, between a knowledge-based, transdisciplinary participation in research projects on the one hand, and to distinguish a procedural and interest- bound, "communicative" participation in agenda setting on the other. Participation of civil society entities in research processes does not necessarily mean that they are already able to influence the conditions of such processes, the agenda setting. However, new research questions are often generated from the results of completed or ongoing research projects.

It is possible that the expertise of representatives of CSOs that were involved in such previous projects or have exercised advisory functions to projects enter the agenda setting processes.¹⁷³

The Federal Agency for Nature Conservation (BfN) sees his primary task in the "Transfer Research" ¹⁷⁴. The focus of the work is on the translation of results from the (basic) research into practice (e.g. for policy advice, or management tasks). The transfer step is performed in the reverse direction by the requirements for practical research (e.g. via conferences and practical workshops) and from scientific knowledge interests are formulated.

This is different for the Federal Office for Radiation Protection (BfS). In its mission statement is written that "concerns of the population" are taken up and that the "dialogue between specialists and community groups" will be encouraged¹⁷⁵. The understanding of research,

¹⁷² ibid, p 10

¹⁷³ ibid, p 11

¹⁷⁴ <http://bfndeu01forschungverstaendnis.html>

¹⁷⁵ <http://www.bfs.de/de/bfs/wir/leitbild.html>;

however, is rather characterized by a one-dimensional understanding of knowledge creation and transfer and occurs rather as recommendations oriented than dialogue based.

Since 2012, the platform Renewable Energy is operated jointly with the BMWi (Federal Ministry for Economy and Energy). As part of this platform actors from politics, economy and society develop common solutions to the challenges that connect to the further expansion of renewable energies. Represented in the steering group, in addition to numerous federal and state ministries, industry-related associations and large companies are also Naturschutzbund Deutschland (NABU), the World Wide Fund For Nature (WWF) and the Federation of Consumer Organizations¹⁷⁶.

Other forums under the umbrella of BMWi are Dialogue Forum Energy Efficiency, Future Energy Grids or the Forum Power Plants which all involve environmental organisations or consumer organisations, who in number compared to other stakeholders are underrepresented¹⁷⁷.

Finally, the so-called "associations title" of the BMU is to be mentioned. Here in particular environmental organizations can freely submit applications to relevant topics that can be promoted in the order of between about 5,000 to 75,000 € (in the annual allocation procedure that is based on expert opinions from the ministries)¹⁷⁸. However, not being funded with these grants are projects whose focus is on scientific research and investment¹⁷⁹. Thus, no influence on the research agenda of the BMU and its departmental research institutions is possible, but a signal regarding CSO relevant research topics can be set.¹⁸⁰

So, in general a large part of scientific policy advice in Germany is expert-oriented. However, an increasing part relates itself to participatory issues and gives more attention to users, consumers, and citizens. Citizens and civil society organisations have a long tradition in bringing issues related to science and technology to the political agenda.

The environmental movement, reaching back to the 1980s, organised itself in several local and regional civil society organisations, with the Bund für Naturschutz Deutschland (BUND,

¹⁷⁶ Bergmann, M. (2013): Strukturelle und programmatische Hindernisse für eine Partizipation der Umweltverbände in der staatlichen Forschungspolitik, Studie für die *Zivilgesellschaftliche Plattform Forschungswende* im Auftrag der VDW e.V.; http://data9.blog.de/media/755/7388755_65a84169a1_d.pdf, p 12

¹⁷⁷ *ibid*, p 14

¹⁷⁸ <http://www.umweltbundesamt.de/projektfoerderungen/merkblatt.htm>;

¹⁷⁹ http://bfu.de/0204_verbaende_foerd.html;

¹⁸⁰ Bergmann, M. (2013): Strukturelle und programmatische Hindernisse für eine Partizipation der Umweltverbände in der staatlichen Forschungspolitik, Studie für die *Zivilgesellschaftliche Plattform Forschungswende* im Auftrag der VDW e.V.; http://data9.blog.de/media/755/7388755_65a84169a1_d.pdf, p 13

Friends of the Earth Germany)¹⁸¹. Also large-scale projects, in particular on new infrastructures, frequently lead to CSO and citizen engagement.

Upstream engagement is currently to a large extent organised at the national level by the Wissenschaft im Dialog¹⁸² (Science in Dialogue), all formats are aimed at raising awareness for the role of science to society and the individual, and motivating people to form an opinion and actively get involved into the political processes.

At the level of the 16 German states (Länder), considerable efforts are put into stimulating new interactions and interfaces between universities (and research organisations) and industry: The German states account for around 60% of the total public R&D investment.

Private foundations in Germany have increasingly funded research programmes and projects over the last years and constitute a growing field of the promotion of science. "Science, the Public, and Society" is a special funding offer to support researchers who want to communicate the tasks and results of their research or who want to foster the public understanding of science at large¹⁸³. Some examples are the Fritz Thyssen Stiftung, Volkswagen Stiftung, Bertelsmann Stiftung, and Robert Bosch Stiftung¹⁸⁴. The Stifterverband für die Deutsche Wissenschaft is the business community's innovation agency for the German science system. About 3,000 companies and firms are members of the Stifterverband. All activities aim at supporting the German science system in structural respect or by directly promoting research on specific fields and issues. Together with Mercator Stiftung the Stifterverband ran a programme called 'More than Teaching and Research'¹⁸⁵. The aim of the programme was to support universities to define their role in society rather than exclusively on excellence in research and teaching. Together with the US based Rosalynn and Jimmy Carter Foundation and within this programme they organised a competition and gave funds to 6 German universities for their suggested community related activities (from social learning up to community based research). 78 universities were in competition for the funds. The awards supported development and at the same time created attention for a diverse university landscape. Stifterverband is a private, dedicated and not-for-profit association. Through donations, membership fees and other forms of income, Stifterverband generates annual funds of well over 120 million EUR, making it the largest private institution of its kind in Germany.

¹⁸¹ <http://www.bund.net/>

¹⁸² <http://www.wissenschaft-im-dialog.de>

¹⁸³ It is hard to get a complete overview about the funding volume of private foundations. The Stifterverband für die deutsche Wissenschaft (<http://www.stifterverband.de>) is funding projects and structures with more than 30 mio. euros per anno.

¹⁸⁴ <http://www.fritz-thyssen-stiftung.de/>; <http://www.volkswagenstiftung.de/>; <http://www.bertelsmann-stiftung.de/cps/rde/xchg/bst>; <http://www.bosch-stiftung.de/>

¹⁸⁵ http://www.stifterverband.info/wissenschaft_und_hochschule/hochschulen_im_wettbewerb/mehr_als_forschung_und_lehre/

The MASIS country report for Germany is the only one that mentions Science Shops as Citizen- or Civil society organisations initiatives.

For the following section of the PERARES country report research funders from across the Germany were interviewed¹⁸⁶. The sample of institutions interviewed cannot be described as representative in a statistical sense. It did, however, reflect a wide range of institutions, which on the one hand finance research and on the other advocate a sustainable development of society and therefore community based research. The sample of institutions interviewed can be characterized as follows:

- 15 fund providers with widely differing funding volumes: ranging from €20,000 to €2.4 billion.
- Of the 15 fund providers, 9 are foundations: 3 foundations for the environment and nature conservation, 2 industrial foundations, 2 community foundations, 2 foundations of the Federal States, 1 foundation linked to a political party, 1 trade union foundation, 1 medical foundation, 1 Federal Government foundation¹⁸⁷
- 4 ›green‹ institutes
- 2 large research foundations outside the universities (Leibniz and Helmholtz)
- 2 Ministries of Science and Research of the Federal States (Baden-Württemberg and North-Rhine Westphalia)
- 1 NGO
- 1 University
- 1 research project whose subject is the establishment of community based research in society.

¹⁸⁶ Baden-Württemberg-Foundation, Community Foundation for the town of Kassel and its administrative district, Friends of the Earth (BUND), Daimler-Benz Foundation, German Environmental Foundation (DBU), German Research Foundation (DFG), German University Foundation, Hans-Böckler-Foundation, Helmholtz-Community (Helmholtz-Centre for Environmental Research), Institute for Ecological Economic Research (IÖW), Institute for Socio-Ecological Research (ISOE)), Konrad-Adenauer-Foundation, Leibniz-Community (Leibniz-Institute for Zoological and Wild Animal Research), Michael Foundation – foundation for epilepsy, Ministry for Innovation, Science and Research of the State of NRW, Ministry for Science, Research and the Arts, Baden Württemberg, Eco-Institute, Robert-Bosch-Foundation, Apfelbaum Foundation – Partners for a Growing-Together of the Living Environment, GEKKO Foundation, NRW Foundation for Environment and Development (SuE), Hamburg University, Competence Centre for a sustainable university, Wuppertal-Institute for Climate, Environment, Energy, Civil-societal Platform 'Change Research'

¹⁸⁷ Some of the foundations fit into several of these categories.

Financing of science and research in Germany

Around €70 billion Euro are presently spent on research and development in many.¹⁸⁸ Approximately two thirds of this amount is raised by the commercial sector, the remaining third is shared more or less between the Federal Government and States.

The Federal States allocate more than 90% of their research funds through the universities. This means that scientists working in the universities ultimately decide for which research subjects these funds will be used. The principle of "freedom of research and teaching" is considered a very important moral asset. This principle is considered to be guaranteed by the award of research funds. Anyone attempting to restrict this principle can expect very strong protests.

The Federal Government awards its research funds through funding programmes, which are put out to tender. The Federal Ministry for Education and Research (*BMBF*) has the largest research budget.

To this must be added research by institutions outside the universities (such as the Leibniz-Community, Helmholtz-Community and Max-Planck-Society), which are financed by the Federal Government and States jointly. The same applies to the German Research Community, which has an annual funding volume of around €2.4 billion available.

Around €250 million research funding is raised by private institutes without a purpose of gain. As a rule these are charitable foundations, which make the interest received on their foundation capital available for project funding purposes. There are almost 19,000 foundations in Germany. Some of them also support scientific projects.

The large, institutionalised CSOs - such as NGOs, trade unions, and churches - have an opportunity to acquire public monies for their scientific questions through their contacts in science and politics. Some of these institutions have even established their own foundations and thereby opened up a source of capital for their scientific concerns.

Higher level drivers in Germany for engaged research are difficult to discover. But the WBGU (German Advisory Council on Global Change) states in its flagship report: "Increased participation (ownership) by society is a key factor for a successful transformation towards a low-carbon society. This applies to research and education as well. More civil society participation in transformation-related research increases its social relevance and legitimacy, enables different stakeholders' knowledge to be integrated into the research process and, in an ideal scenario, enhances the legitimacy and acceptance of transformation-relevant policies. Participation in the research process can take a variety of forms. For example, the acquisition

¹⁸⁸Figures and ratios to be found in the *BMBF* data portal, <http://www.datenportal.bmbf.de/portal/index.html>.

and dissemination of knowledge about natural and environmental processes that is achieved via participation in research can promote a sense of ownership. One way of doing this is by involving non-scientists in the research process, e.g. in the identification of research topics and the generation of data. This integration of 'laypersons' facilitates the public's identification with the research topic, and is a way of increasing acceptance of research processes in general and its findings in particular."¹⁸⁹ Since its publication in 2011 the Federal States of North-Rhine Westphalia and Baden-Württemberg increased their activities towards a new understanding of research and the role higher education but also civil society can play in the process of transformation. With a publication of a Research Framework "Progress NRW - Research and Innovation for Sustainable Development" in February 2013 this process is at its beginning.

Although institutions which finance research were selected for the interviews after a few conversations it turned out that the term "community based research" (CBR) or similar terms such as "community orientated research" or "transdisciplinary research"¹⁹⁰ did not mean very much at all to many of these institutions. At the same time we found in parallel that the voices demanding community based research are being heard ever more loudly in Germany. Part of these, on the one hand, are the so-called "green" institutes, now concentrating the focus of their subject on the area of society's sustainable development. On the other hand there are also now many scientists in universities, universities for applied sciences, and in research institutions outside the universities, to whom socio-ecological research subjects and the methodology of transdisciplinarity which accompanies it is of particular concern. When, for example, in 2011 the Federal Ministry for Education and Development wanted to phase out its funding focus on "socio-ecological research", scientists across the whole of the Federal Republic opposed this move in a memorandum, and this funding focus has now been extended to 2016.

Research for sustainable development, which in Germany as a rule means research oriented to community, does certainly have political weight. For this reason we have decided also to include institutes and universities in these studies, in order thereby to be able to document the state of discussions concerning community engaged research in science and politics in Germany.

¹⁸⁹ http://www.wbgu.de/fileadmin/templates/dateien/veroeffentlichungen/factsheets/fs5/wbgu_fs5_en.pdf

¹⁹⁰ „Transformative science" opens discipline boundaries and involves society to a much greater extent. In June 2011 this type of science was called for in Germany by the main expert opinion of the German Federal Government's Wissenschaftlicher Beirat für Globale Umweltveränderungen (WBGU) [*Scientific Advisory Council for Global Environmental Changes*]. It is entitled: „Welt im Wandel – Gesellschaftsvertrag für eine Große Transformation" [*A changing world - Social Contract for Large Transformation*]. (<http://www.wbgu.de/hauptgutachten/hg-2011-transformation/>)

The largest number of foundations active in Germany are Community Foundations. These are foundations, which carry out their own projects for the local community and fund those of others. Several of these foundations have also included the funding of science and research into their charter. Initially we selected community foundations for our study which listed both funding of "community engagement" and "science and research" in their charter. During the course of conversations it became clear, however, that with most foundations the funding volume was between €10,000 and €50,000 and that the amount left for research funding was hardly worth mentioning. This is why we ceased our efforts to hold discussions with community foundations about community based research, though the interviews which we already had conducted with community foundations are included in the evaluation.

The term "bürgerbeteiligte Forschung"

For the German context the term "research-in-partnership with CSOs" was reformulated as "bürgerbeteiligte Forschung", a term which is also close to the term "community based research" or "community engaged research" and as such easier to understand for the German research community. Community engaged research can be differentiated in two ways:

1. Initiated by science /initiated by citizens or civil society groups
2. By the prerogative of science with regard to the conduct of a research project / citizens and science are partners in its implementation.

The following matrix results from this differentiation:

	<i>initiated by science (a)</i>	<i>initiated by citizens (b)</i>
<i>Science has the prerogative regarding research project (c)</i>	Science has the idea for the project, but intends or is required to take into account the needs and interests of civil society without granting it (a right of) co-determination regarding concept design and implementation of the research project. ¹⁹¹	Citizens have questions they wish to have handled scientifically. Science takes on these questions, but demands a prerogative with regard to concept design and implementation of the project. To what extent citizens actively participate in the project remains an open question.

¹⁹¹ All research projects where man is the object of research are excluded here.

Implementation on partnership basis (d)	A research project initiated by science where citizens and their interests are included on an equal footing. They are granted the right to have a say in the research process. Which means, for example, that when interim results are available they are able to have an influence on the further course of the research project.	The scientific questions for the research project are raised by a civil society group. Scientists take on these questions and together with the civil society group draw up a concept for a research programme and grant citizens the right to have a say in the research process.
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The evaluation will show of which forms of community engaged research were mentioned during the conversations, e.g. many respondents linked the term community engaged research to the methodology of transdisciplinarity, which states that all necessary partners of the research process as well as all relevant society groups are included at an early stage.

As a rule and in contrast, 'Citizen Science' in Germany is understood as a methodology where citizens collect data on behalf of science, counting butterflies for example or taking samples from waterways. Since the citizen hereby merely functions as a helper of science, but is not able to insert his/her questions into the research process, this form of research was not subsumed into the term 'community engaged research'.

Results

We contacted a total of 39 institutions. 23 of them granted us an interview. The Ministry of Science, Research and the Arts of Baden-Württemberg declined an interview with the comment that they had just set up a group of experts with regard to the subject of science and sustainable development of society and wanted to wait for its recommendations before commenting on this subject.

Amongst other institutions that declined to contribute - without explanation - was the Federal Ministry for Education and Research, one of the largest research fund providers in Germany. Also at quite a number of the universities contacted nobody felt responsible or authorized to give us any information concerning the subject community engaged research. The Federal Ministry for the Environment, Nature Conservation and Nuclear Safety has recently set up a department for citizens' participation, which has several units. But since the department was still concerned with setting itself up an interview was announced for 'in a few months' time. Anyway, the setting up of such a department is also a clear signal.

Participation in Research with and for CSOs

Seen as a trend it can be said that industrial foundations, foundations and organizations, which are primarily concerned with basic research or carry out outstanding research projects, as well as community foundations have hardly ever considered the subject of Research with and for CSOs.

The majority of the institutions interviewed were clearly in favour of community engaged research and also demanding that more should be done to conduct research in this manner. Three other institutions were also in favour of community engaged research, but clothed their statements in very many 'ifs and buts' which made it clear that they had still hardly ever come across this subject.

Other opinions expressed were that the largest part of research always had to have a societal orientation (with the exception of basic research), and not only the application-oriented engineering sciences but also disciplines such as economics, business and administration, and law. As long as research was financed by public money, freedom of research and teaching only applied conditionally. If society financed research, it also had a right to expect that such research was of benefit to it. The democratic structures stood for the fact that this right was indeed honoured. One could therefore proceed from the assumption that the *BMBF* (Federal Ministry for Education and Research) did sponsor on principle what society wished to have sponsored.

The inclusion of civil society via NGOs was dismissed categorically by one respondent, since these have to be identified as lobbying organizations. As an example in this context Greenpeace was mentioned. Greenpeace, as an NGO mainly existing on donations, has to demonstrate the results of their work to their donors in a publicity-creating manner in order to ensure donations also for the following year and as such will never be able to represent civil society needs unbiased.

Other respondents gave clearly positive statements with regard to Research with and for CSOs, seeing citizens' participation increasingly establishing itself as the key challenge of society and to that extent expecting community based research to play an ever greater role in the science system. Citizens should not be seen merely as suppliers of data, but in respect of Research with and for CSOs overcome science's claim to have the prerogative. Research with and for CSOs should be organized on a partnership basis between science and citizens.

Thirteen of the institutions questioned have already initiated community based research themselves, worked on such projects or financed, resp. co-financed them. Eight institutions did not have any experience yet with community based research projects, three respondents did not make any comment concerning this point.

The type of own experience with regard to Research with and for CSOs and also with citizens' participation in these research projects showed a broad variety:

In the research project "Interaction Man/Waterways Ecosystem" the Leibniz Institute for Waterways Ecology and Freshwater Fishing analysed line fishing as a socio-ecological system. Within the frame of this project fishing clubs were able to introduce subjects they wanted to have researched scientifically. They wanted to know, for example, how the over fishing of inland waterways affected fish stocks.¹⁹²

The Institute for Ecological Economic Research investigated jointly with the Federal Institute for Risk Evaluation how the advantages and dangers of nano-technology were perceived by the public¹⁹³. Initially, citizens and their perception of nano-technology only was the subject of the research. The project ended, however, with a citizens' vote on the use of nano-products. Here citizens were actively included in the transfer of the results of nano-technological findings into society.

The GEKKO Foundation financed a research project of the Rural Agriculture Study Group, in which the effects of patents on seeds free from genetic engineering were examined.¹⁹⁴

In a joint project financed by the *BMBF* on lead poisoning amongst birds of prey was investigated under the management of the Leibniz Institute for Zoological and Wild Animal Research. When these results were available, all parties involved (hunters, foresters, munitions manufacturers, owners of woods, conservationists, and the interested public) were asked in order to find a sustainable solution for this problem to which all could agree.

When evaluating the examples our respondents told us it became noticeable that citizens, civil-societal groups, and NGOs were allowed to take part in the research projects in a rather marginal way. They were only brought in when the research results were available and the question was now in which way they could be useful for civil society, and in which way the transfer of the results could be most successful. Research questions were also partly included and attended to within the projects. In none of the projects citizens participated in a manner which enabled them to influence the direction of the research process. The basic foundations of the projects could not be shaken by citizen participation. A number of other projects fell into the category of political participation with an underlying scientific setting (evaluation and similar). None of the interviewees was able to name a research project which had been initiated by citizens.

¹⁹² http://www.igb-berlin.de/interaktion_mensch-_gewaesseroekosystem.html

¹⁹³ www.ioew.de/innovation-und-technnologien/projekt/Internationale_Untersuchung_von_Einflussfaktoren_auf_die_Wahrnehmung_der_Nanotechnologie/

¹⁹⁴ A special interest group of farmers, advocating socially and environmentally safe agriculture.

Participation of citizens or civil-societal groups in science and research

According to the definition of the World Bank, local groups, non-government organizations (NGOs), trade unions, indigenous groups, charitable organizations, church organizations, associations, and foundations count amongst Civil Society Organizations.¹⁹⁵

The easiest way to acquire citizens for a participation in projects was through contacting different clubs. Other scientists reported that citizens' participation through NGOs was the easiest to establish. Here, frequently, hierarchical structures or at least working structures had already formed for decades, which made cooperation easier. A citizens' initiative on the other hand, which had only recently been formed, took on a particular problem in its region, and wanted to take all the decisions in a basic-democratic way, was clearly more difficult to integrate into a research process. So the question arises, whether a barely institutionalised civil society group has no opportunity to have the questions it raises dealt with scientifically – on the assumption they are of scientific quality. The respondents who did give thought to the inclusion of the individual citizen or the ›amateurish‹ citizens' initiative, realized that intermediary institutions are necessary for this, therefore institutions mediating between citizens and science.

It was wondered whether in Germany Science Shops could fulfil this function on a large scale. In his model, Science Shops are attached to the universities and universities for applied sciences, receive their basic finance from the Federal State or the universities, and the latter have to spend a certain percentage of their research budget on community based research.

The State of North-Rhine Westphalia has developed the mediator model of regional innovation networks.¹⁹⁶ These networks work on concrete research and development projects in their region and are to include all the actors from science, the economy, administration, and civil society. Economic development agencies, universities of applied sciences or Science Shops, for example, could function as such a platform.

Possibilities of establishing Research with and for CSOs in science and civil society

A suggestion made most frequently was to change the allocation criteria for calls for proposals and funding programmes. With regard to an application-oriented and transdisciplinary focus of funding, citizens' participation should be made a condition – analogous to focuses of

¹⁹⁵ <http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/CSO/0,,contentMDK:20101499~menuPK:244752~pagePK:220503~piPK:220476~theSitePK:228717,00.html>

¹⁹⁶ See NRW Framework Programme Progress – Research and Innovation for Sustainable Development, p. 31 and following pages (draft version)

funding in economic science or technology, where the participation of SMEs was demanded as a rule.

However, societal actors should be taken into consideration not only at the time when the allocation criteria are established but when research projects are drawn up. Civil society groups, the majority of them institutionalised NGOs, should be able to submit their interests via a participation process, prior to calls for proposals for a research programme being made.

Over and above this, foundations were to be made more sensitive to Research with and for CSOs and citizens shown which opportunities they had on the one hand to play a part in science and research and on the other which concrete benefits would thereby result for them.

The following proposals were also made in order to strengthen the situation of Research with and for CSOs in society in general and the scientific system in particular:

- Universities should set up contact points for citizens and civil-societal groups and thus enable Research with and for CSOs. And in return they should make an offer for Research with and for CSOs.
- The transfer between science and civil society should be structured as a dialogue.
- The *BMBF* should communicate Research with and for CSOs as a desideratum (necessity).
- In order to learn more about procedures and methods as to how citizens' participation can be realized in science and research, Research with and for CSOs should be imposed as an own focus of funding.
- By now, transdisciplinary methodology is demanded with regard to ever more research areas, but individual disciplines, such as for example biotechnology, are exempted from it. It ought to be a scientific standard in all disciplines.
- Societal actors should also be made to participate in the evaluation of research programmes.
- Civil societal actors should become more professional, in order to thereby extend their possibilities to influence science.

Prospects for the establishment of Research with and for CSOs in society

Twelve funding organisations were of the view that the role of Research with and for CSOs in society will grow, six believed that this form of research would continue to exist on the margins and six felt unable to make a prognosis on Research with and for CSOs development. It is interesting that although 19 of the interviewees 'stuck up' for Research with and for CSOs only 12 believed that Research with and for CSOs was a form of science and research whose importance in our society would increase.

Others actually hoped that Research with and for CSOs would find increasing acceptance in science and society, but did not believe that industry and science interested in outstanding research projects would accept this without further ado. In the future outstanding research projects and Research with and for CSOs could exist side by side, but universities will have to be set up differently, i.e. they need to see themselves as social actors. Research with the aid of third party funds has increased hugely over the last decades and therefore ever more scientists feel themselves obligated first of all to those non-university fund providers, the large majority of whom come from private industry.

Scientific knowledge is an indispensable element of modern governance and is becoming increasingly important in our ever more complex world, stated the WBGU (German Advisory Council on Global Change) in its flagship reports¹⁹⁷. This applies particularly to the present transition, which is beset by considerable uncertainties. The key to successful transformation lies in the linkage between invention, innovation and diffusion processes and the acceleration of these processes to make best use of the limited time available.

Policy can't rule and specify the way how science is performed, but policy can predetermine themes. On the other hand Scientific advice can make an important contribution to policy-making, by analysing the wealth of complex information, offering integrated solutions, exploring opportunities, and communicating the results effectively. The task of the scientific community is therefore to identify policy options; it is a matter for the democratically elected decision-makers to decide on the appropriate course of action.

Building on the flagship reports a UBA¹⁹⁸ / BMU¹⁹⁹ funded project ("Requirements and objectives of civil society participation in the national research agenda"(running time 8/2012 to 7/2014) called "Civil Society Platform – Change in Research (Zivilgesellschaftliche Plattform – ForschungsWende)". The platform includes environmental organizations (BUND, NABU, DNR), development agencies, health organizations, churches (Protestant, Catholic.) Where trade unions (DGB, Verdi) and other civil society organizations. The office of the Civil Society Platform on turn is under the umbrella of the Federation of German Scientists.

The platform supports and encourages transformation and participation in science and research. It takes a critical look at current directions of research funding and formulates alternatives that promote problem-oriented, trans-disciplinary research and that support disciplinary research involving more solution-oriented, integrative approaches. There will be more Research with and for CSOs when citizens demand it.

¹⁹⁷ http://www.wbgu.de/fileadmin/templates/dateien/veroeffentlichungen/factsheets/fs2011-fs1/wbgu_fs1_2011_en.pdf

¹⁹⁸ UBA - Umweltbundesamt (The Federal Environment Agency)

¹⁹⁹ BMU - Bundesministerium für Umwelt, Naturschutz und Reaktorsicherheit (Federal Ministry for the Environment, Nature Conservation and Nuclear Safety)

Conclusions

On the basis of the interviews with 14 institutions sponsoring science and research and 10 institutes or organizations dealing with the sustainable development of our society, it is possible to state the following:

- There are first beginnings at the Federal Ministries and those of the Federal States to include citizens' participation and transdisciplinarity into mission statements and funding programmes. Seen before the background of these state fund providers' total budgets, however, this is at the moment hardly more than a drop in the ocean. However, it looks at present as if this might change soon in at least one or other of the Federal States.
- Dialogue forums set up by ministries or federal agencies can to a certain degree be seen as platforms for input to research agendas when adequate participation of all societal groups is guaranteed.
- Participation of civil society entities in research processes does not necessarily mean that they are already able to influence the conditions of such processes, the agenda setting. However, new research questions are often generated from the results of completed or ongoing research projects.
- It is possible that the expertise of representatives of CSOs that were involved in such previous projects or have exercised advisory functions to projects enter the agenda setting processes.
- The classic foundations for research funding barely know what to think of terms such as Research with and for CSOs.
- This also applies to the majority of scientists.
- Research projects including citizens' participation are initiated by science. There do not seem to be any research projects, which have been initiated by citizens.²⁰⁰
- As a rule, citizens' participation in the research process itself is extremely difficult. For civil societal groups it seems almost impossible to co-design the research process. At present CSOs are mainly included, when the question arises how findings could be of benefit to citizens and in how a transfer of results could be organized most efficiently.
- For smaller groups of citizens who are not institutionalised and consequently do not have a societal lobby there are still only few possibilities to find fund providers for their scientific questions. One possibility lies with the community foundations. Their funds are very limited, though, and they are hardly known for their readiness also to fund scientific projects.

²⁰⁰ None of the respondents was able to name one.

- Besides in all areas of society the call for involvement in the decision-making processes is growing ever louder. In front of this background the constellations seem to be good at present, to lead community based research out of its marginal existence in the coming years.

The study for Platform Forschungswende concludes that the BMBF at least for two structural reasons should be a central addressee of participation efforts when setting research agendas : Firstly, it is main supporter of publicly funded research, with the largest displacement and secondly, it is the most important (partly exclusive) sponsor of major research communities and organisations.

In addition, BMBF also for its support of specific research fields should be in the focus of efforts to participative agenda setting. The lack of transparency of decision-making processes in the setting of research agendas in large research communities is another reason that the largest public funder should be the central addressee, especially because lately a readiness for greater participation of civil society organizations was recognized at the ministry level.²⁰¹

Nevertheless - this is the overall résumé from the 24 discussions -community based research slowly seems to encounter greater resonance in the 'landscape' of research and funding. For a few years now it has been possible to see an equivalent of this development in the economy, which is trying out new innovation models (open innovation and other models), where citizens are included ever earlier in the innovation process, in part even when ideas for new products and services are generated.

Under the title: The establishment of the theme "Responsible Research and Innovation (RRI)" in the European research policy and funding, the Committee for Education and Research published a report on the previous implementation and German participation in RRI projects and the ideas of RRI in Horizon 2020, describing in detail the aspects of public engagement.²⁰²

²⁰¹ Bergmann, M. (2013): Strukturelle und programmatische Hindernisse für eine Partizipation der Umweltverbände in der staatlichen Forschungspolitik, Studie für die *Zivilgesellschaftliche Plattform Forschungswende* im Auftrag der VDW e.V.; http://data9.blog.de/media/755/7388755_65a84169a1_d.pdf, p 8

²⁰² BMBF: Bericht Die Verankerung des Themas „Verantwortungsvolle Forschung und Innovation“ in der Europäischen Forschungspolitik und -förderung Bonn, 22.03.2013, <http://www.forschungswende.de/images/PDF/ADrs%2017-386.pdf>

8. Experiences of incorporating the needs of CSOs in research funding in France

The MASIS country report for France²⁰³ (Monitoring Policy and Research Activities on Science in Society in Europe) was written in 2011. It analyses a research and higher education system basically established between 2004 (LOPRI – Orientation and Programming Law of Research and Innovation) and 2007 (LRU - Law on the freedoms and responsibilities of universities). The report states that science does not appear as a top priority in France taking as argument the decline in the proportion of the budget devoted to research. Moreover, it is also noted that France has a relatively traditional "top-down" governance model, in which the attention paid to questions on the interface between science and society remain timid despite the creation of a scientific sector Science and Society within the Ministry of Research in 2009, and the creation of the programme REPERE by the Department of Ecology (to be addressed below). The authors of the MASIS report on France note an increased consideration of this issue at the local level, and especially at the regional level (call of projects PICRI, ASOSc, Chercheurs citoyens which will also be presented below).

Since the publication of this report, and since the change in the French executive, national conferences on higher education and research policies have been organized at the request of the new minister of research in order to define the content of a new Law on Higher Education and Research which has then been adopted in July 2013. The organization of the French research system is under transition, but it is difficult if not impossible to think that the system will much evolve in favour of the science and society issue in the short or medium term. It seems especially to confirm a trend observed more generally in Europe and around the world that is to organize research as a provider for the economic development and competitiveness at the expense of sustainability.

An overview on French experiences in incorporating the needs of CSOs in research funding however would deserve to be supplemented by interviews with institutional actors in order to have a clearer idea of, even marginal, discussions taking place in the different steering and programming structures of research, especially at the national level.

²⁰³ <http://www.masis.eu/english/storage/publications/nationalreports/masisnationalreportfrance/>

Steering of research and higher education at the national level

The Ministry of Higher Education and Research (MESR)

The Ministry of Research addresses questions of science and society, but does this often through the prism of what is called in France the *scientific and technical culture* (popularisation of science or public understanding of science) displayed as being at the intersection of the following issues: "access of all citizens to science, development of the interest of the young people in science, promotion of scientific and technical heritage."²⁰⁴

However, since 2009, a scientific sector "Science and Society" exists in the service of "Strategy for research and innovation" within the General Directorate for Research and Innovation²⁰⁵.

The list of its missions however does not suggest that the relation between science and society is a priority. This relation is still understood fairly conventional, and mainly in terms of "public understanding of science", or on ethical issues. Political, economic and social dimensions are not prioritised:

- Knowledge representations and knowledge transfer;
- Risk, safety and scientific expertise;
- Watch over controversies;
- Reflection on the procedures of public debate;
- Awareness of the ethical aspects of the research;
- Approaches on the new tasks of the State: definitions and purpose;
- Management and dissemination of scientific and technical knowledge.

There is neither funding for participatory research or citizen science nor an pro-active reflection within the Ministry (at least nothing that would be communicated to the public) beyond the Science and Society National Thematic Group whose role is to consult stakeholders of research to contribute to the definition of the position of France within the framework of the European policy for research and innovation.

Moreover, the last newsletter from the Science in Society National Contact Point,"in charge of informing, increasing awareness and advising on potential project funding opportuni-

²⁰⁴ <http://www.enseignementsup-recherche.gouv.fr/pid24654/sciences-et-societe.html>

²⁰⁵ <http://www.enseignementsup-recherche.gouv.fr/cid24148/direction-generale-pour-la-recherche-et-l-innovation-d.g.r.i.html#sciencessociete>

ties”²⁰⁶ ... is a year old... (In the frame of the launch of Horizon 2020, a new National Contact Point has been appointed in November 2013.)

The Ministry of Research is still very far from what is designed under Horizon 2020 as the "Science with and for Society" approach. However, these questions are not totally absent from the various components of the orientation and national programming of research in France.

France 2020: the strategic agenda for research, technology transfer and innovation

Nine proposals are presented in the strategic agenda "France Europe 2020" published by the French government in May 2013.²⁰⁷

The first, consisting in "Mobilising actors on major societal challenges" and the fifth "Encouraging scientific and technical culture and science/society dialogue" are the only ones to clearly address Science and Society issues.

On the mobilization of actors on major societal challenges it is written: "The contribution of research is based on collaborative projects at national and European or international level, and must be accompanied by an improved dialogue with society." ²⁰⁸ and further "The individual and collective behaviour of society towards these changes to come will be studied to ensure the adequacy of the implementation of this energy transition and expectations of society." ²⁰⁹

Concerning the science/society dialogue developed under the point "Encouraging scientific and technical culture and science/society dialogue" the following proposals are mentioned²¹⁰:

- A monitoring unit will be set up on issues relating to scientific controversies and to the scientific expertise available to the MESR.
- A national debate will be initiated on expertise and on the relationship between ethics, expertise, debates, and division management.

²⁰⁶ <http://www.enseignementsup-recherche.gouv.fr/cid71905/un-dispositif-national-d-accompagnement-a-horizon-2020-renforce.html>

²⁰⁷ http://cache.media.enseignementsup-recherche.gouv.fr/file/France-Europe_2020/21/7/AgendaStrategique_252217.pdf

²⁰⁸ *Ibid* p9

²⁰⁹ *Ibid* p15

²¹⁰ *Ibid* p68

- An interdisciplinary and comparative reflection will be launched on French and international best practices in the science and society dialogue.

This *a priori* favourable but still vague openness - what exactly does Science and Society "dialogue" mean? - remains to be translated into action.

Orientation of Research

The Ministry of Research is surrounded by various advisory bodies that seem somewhat redundant.

Superior Council for Research and Technology (CSRT)

The Superior Council for Research and Technology is a forum for consultation and dialogue with research stakeholders and partners, which is consulted on all major issues of science and technology policy of the government, and on the monitoring of this policy.²¹¹

The council is composed of two colleges of 22 members: representatives of the scientific and technical communities for the first college, and of other partners in research (representatives of labour, productive, social and cultural sectors, of other stakeholders and of regions) for the second one. Of the 44 members, three members come from CSOs.²¹²

The CSRT regularly publishes opinions related to evolutions in the French system of research and higher education²¹³. The last three opinions are directly or indirectly related to the 2013 act on higher education and research.

Contribution to the "Conferences on Higher Education and Research", October 2012²¹⁴

The following excerpt from the contribution to the conferences on Higher Education and Research seems interesting in regard to the issue of science and society.

"Science and Society

²¹¹ <http://www.enseignementsup-recherche.gouv.fr/pid24775/conseil-superieur-de-la-recherche-et-de-la-technologie-c.s.r.t.html>

²¹² <http://www.enseignementsup-recherche.gouv.fr/cid22842/organisation-et-composition-du-conseil-superieur-de-la-recherche-et-de-la-technologie.html>

²¹³ <http://www.enseignementsup-recherche.gouv.fr/pid28878/les-avis-du-conseil-superieur-de-la-recherche-et-de-la-technologie.html>

²¹⁴ http://cache.media.enseignementsup-recherche.gouv.fr/file/2012/69/7/Assises_de_la_recherche_233697.pdf

Taking into account through research the needs of society is of high relevance. It supposes mutual and fruitful exchanges between researchers and economic and social actors.

Thus we propose:

- *Promote equal opportunities, reduce inequalities, contribute to addressing the challenges of learning and training throughout life, promote access to scientific and technical culture by fully integrating the most excluded or unfavoured populations.*
- *Stimulate personal or collective initiative, especially from young people, creativity, project approach, social and cultural innovation, develop participatory and collaborative sciences, actively participate in the responsible, equitable and sustainable development of territories.*
- *Strengthen democracy through citizen participation, promote deliberative practices and various forms of discussions related to techno-scientific issues, advocate for transparency of decisions and guidelines, develop a collective risk culture, encourage the deployment of different types of expertise, promote access to debate for the whole society on the stakes, advantages and disadvantages of science and technology and their uses.*
- *A stronger involvement of scientists as citizens in public debate, based on new exchange rules, must be implemented from exemplary experimental initiatives. Particular attention will be given to youth through school programs, including integrating the history of science and scientific culture."*

Some recommendations of similar nature have been incorporated into the law during parliamentary discussions.

Review of the Law proposal on Higher Education and Research, March 2013²¹⁵

This rather short review addressed science and society issues only at the margin of a quite general recommendation on the establishment of the Strategic Council of Research, a new structure which role will be to propose to the Prime Minister (and not the Minister of Higher Education and Research) a general national research strategy:

"The CSRT believes that maintaining a place of debate bringing together representatives of the world of research and education, of the economy and of civil society is more than ever

²¹⁵ http://cache.media.enseignementsup-recheche.gouv.fr/file/2013/76/3/2013_03_11_Avis_sur_le_projet_de_loi_enseignement_superieur_et_recherche_246763.pdf

*necessary to better inform public decisions and prepare the widest mobilization on the challenges and opportunities of knowledge (...)*²¹⁶

Review of the budget of the Inter-ministry Mission "Higher Education and Research" (MIREs) 2013, March 2013²¹⁷

The MIREs combines the budget allocations of six departments²¹⁸. Organised into 10 programs²¹⁹, it includes almost all of the effort of public civil research.²²⁰

Of these 10 programs, none specifically addresses the theme sciences and society.

High Council for Science and Technology (HCST)²²¹

The High Council for Science and Technology (HCST) was established in September 2006.

*"Composed of 20 personalities from different disciplines (mathematics, physics, chemistry, medicine, economics, sociology, law, literature...), it has to provide its expertise to the President of the Republic and the Government on all policy issues related to research, technology and innovation. This relates in particular to energy, health and environment. The HCST is now responsible to reflect on three issues: Energy (oil alternatives, sustainable development...), the low attractiveness of science to young people and investment in very large scientific facilities. It also aims to provide a scientific information on social, economic and cultural developments in France and worldwide."*²²²

Initially attached to the Presidency of the Republic, it has been placed under the responsibility of the Prime Minister since 2010.

²¹⁶ *ibid* p6

²¹⁷ http://cache.media.enseignementsup-recherche.gouv.fr/file/2012/46/1/Avis_du_CSRT_sur_le_budget_de_la_MIREs_2013_BON_POUR_IMPRESSION_236461.pdf

²¹⁸ *ibid*

²¹⁹ <http://www.enseignementsup-recherche.gouv.fr/cid61606/la-mission-interministerielle-recherche-et-enseignement-superieur-mires.html>

²²⁰ <http://www.enseignementsup-recherche.gouv.fr/cid61606/la-mission-interministerielle-recherche-et-enseignement-superieur-mires.html>

²²¹ <http://www.hcst.fr>

²²² <http://www.vie-publique.fr/actualite/alaune/recherche-installation-du-haut-conseil.html>

The HCST has been recently dismantled by a decree from November 1st, 2013, in order to be replaced by the Strategic Council of Research created by the last law on Higher education and research.²²³ Nevertheless, it is interesting to have a quick look at its past activities.

The HCST describes itself by the following statements:

*"Its current composition reflects a commitment to place research at the service of society, to better position the French research in the world, and to strengthen links between public research and industrial research."*²²⁴

For the first point the current composition of the council (researchers and industry only) surely limits the reflections on the commitment to place research at the service of society, since *"the High Council shall consist of twenty persons appointed by the Prime Minister, from 5 to 12 members being chosen because of their competence in science and technology, 5-12 others because of the functions they perform or have performed in a company."*²²⁵ At this date, no representative from a civil society organisation is designed as a member of the council.

And indeed, the HCST focused on six referrals that the Prime Minister addressed to the council, one of them being the "reestablishment of trust between science and society"²²⁶ The stake thus turned from *the service to society* into *restoring the trust between science and society (a figure of speech traditionally thought in terms of public understanding of science)*. Anyway, nothing has yet been published by the HCST about this referral.

Nevertheless, the need to be attentive to the needs and expectations of society begins to emerge. Thus, in their contribution to the Conferences of Higher Education and research²²⁷, a consultation process, which preceded the last law on higher education and research, the HCST seems to consider it necessary to take into account civil society in the framing of the research strategy:

"- Recreating the state's strategic and prospective capacity in science and technology, notably by creating a dynamic allowing the convergence of stakeholders (researchers, representatives of civil society, regions and communities, industry, public policy makers) and strengthening the steering role of the Ministry of Higher Education and Research In the Interministerial Mission "Research and Higher Education" (MIREs)"

²²³ <http://www.legifrance.gouv.fr/affichTexte.do?cidTexte=LEGITEXT000028107297&dateTexte=20131101>

²²⁴ <http://www.hcst.fr>

²²⁵ https://fr.wikipedia.org/wiki/Haut_Conseil_de_la_sciences_et_de_la_technologie#Second_Haut_Conseil_de_la_sciences_et_de_la_technologie_.282009-2013.29

²²⁶ http://www.hcst.fr/?page_id=203

²²⁷ http://www.hcst.fr/?uamfiletype=attachment&uamgetfile=http://www.hcst.fr/wp-content/uploads/2013/03/HCST_ASSISES-ESR_VF.pdf

Since the main goal defined in this paper is to "improve the international competitiveness of France"²²⁸, it is to question what remains for actors that wish to promote sustainability?

If later in this report, the issue of society resurrects: "- (...) *Universities also need the means necessary for their development and their essential openness towards society.*" ²²⁹, the report remains unfortunately in a logic of knowledge dissemination.

However, the picture is not totally dark, since the HCST calls for an evolution of the Higher education, research and innovation system by taking as argument "*a very present context of crisis, doubt and apprehension about the technological risk*";:

"These findings should lead to initiatives to strengthen exchanges on science and technology in society by concerted actions between the different stakeholders, maintained over time and being subject to rigorous evaluations. It is clear that the contribution of social sciences is essential in the analysis of these data, which must be conducted in a multidisciplinary way. On this occasion, it should be noted that the human and financial resources for the area should be better adapted to its needs." ²³⁰

Again, this point will not be retained in the law tabled in the parliament, despite the fact that social sciences would have an important role to play in critical analyses of the technoscientific development of our societies particularly in relation with a new interpretation of what is "*progress*".

National Council of Higher Education and Research - CNESER²³¹

The CNESER plays an advisory role in addition to being an administrative court. It is composed of 69 members. Besides the minister, CNESER has 68 councillors. It includes 45 representatives of universities and similar institutions. In addition, 23 people are chosen to represent the political, economic, social and cultural forces in the country. Again, representatives of CSOs are missing. Its advisory role concerns essentially higher education and not research. No report on its advisory role is available online.

²²⁸ *Ibid* p11

²²⁹ *Ibid* p15

²³⁰ *Ibid* p14

²³¹ <http://www.enseignementsup-recherche.gouv.fr/cid53497/le-conseil-national-de-l-enseignement-superieur-et-de-la-recherche-c.n.e.s.e.r.html>

Parliamentary Office of Scientific and Technological Options Evaluation (OPECST)^{232, 233}

The OPECST was established in 1983. With deputies and senators as members, it has rarely addressed issues of science and society. If recently a study was commissioned by the parliament, it only focused on "prospects for the dissemination of scientific, technical and industrial culture". The public hearing, which took place in June 2013²³⁴ confirmed that the study of the OPECST was focused on the dissemination of research results and not on exchanges between the research community and civil society.

2013 Law on higher education and research²³⁵

The parliament has adopted the new law on higher education and research on July 9, 2013. It has integrated amendments proposed by divers stakeholders who have participated in the consultation process through national and regional Conferences on higher education and research.

The steering committee of the consultation process initially excluded CSOs from the call for participation. A coalition of CSOs therefore wrote an open letter claiming their involvement. They could finally participate at the margin of the process and focused their work especially on participatory research. The three pillars of these Conferences reflected in the law are "*the success of all students, a new ambition for research and higher education*", "*the role of research and higher education in the social, economic, ecological transition and the international influence of our country*" and "*a review of the governance of institutions and of sites and networks policies*".

Whether for higher education or for research, the focus is on the need to develop "innovation, technology transfer when it is possible, the expertise and support capacities towards associations and foundations recognized of public utility, and public policies to address societal challenges, social, economic and sustainable development needs."²³⁶

Associations and foundations of public utility are now as well included in the consultation to identify priorities in terms of policy research and technological development.²³⁷

Furthermore, participatory research is finally included since the new law states that "Public research institutions and higher education institutions promote the development of cooperative work with associations and foundations recognized of public utility. They participate

²³² <http://www.assemblee-nationale.fr/commissions/opecst-index.asp>

²³³ <http://www.senat.fr/opecst/>

²³⁴ http://www.assemblee-nationale.fr/14/cr-oecst/programme_AP_diffusion_culture.pdf

²³⁵ <http://www.assemblee-nationale.fr/14/ta/ta0180.asp>

²³⁶ Articles 7, 10, 14 et 15

²³⁷ Articles 14 et 15

in the promotion of participatory research and in the development of technological and social innovation capacity of the nation. This cooperation shall be exercised in respect of the independence of researchers and, in the absence of contrary provisions, on a non-for-profit basis. The research conducted within the framework of this cooperation is, in the absence of contrary provisions, to be made publicly available." ²³⁸

However, the problem is that the majority of associations in France are not recognized of "public utility"(a special mention to obtain from a public process), especially for reasons of size, though their activities are of general interest. This qualifier is therefore quite restrictive. Moreover, respect for the independence of researchers, emphasized here, is never mentioned when it comes to research in partnership with industry.

Finally, the associations are also considered legitimate stakeholders of Universities and Institution Communities, new institutions created by this law to coordinate the policies of its members (universities and higher education and research institution). ²³⁹

Fortunately, due to the mobilization of societal actors (and unfortunately much less due to the mobilisation of researchers),"society" now appears several times in the final text.. These recommendations are fairly new, marginal and leave space for discussions on how to strengthen the links between science and society. The new law on the organization of higher education and research thus opens several modest perspectives in the science and society landscape. The application of the law by the different actors will show how far they are willing to engage.

Programming of research and higher education at the national level

A large part of the budget for public research since 2005 is allocated through the National Research Agency (ANR)²⁴⁰. The rest of the budget consist of recurring credit for research agencies and universities (mainly salaries) and the Research Tax Credit (CIR) for companies. No assessment of the usefulness or effectiveness of this latter has been made since its introduction before the report the Court of Auditors published in September 2013 which points out the disproportion between tax exemption and the limited effectiveness of the CIR, the inability to control adequately its use and cumbersome management. ²⁴¹

²³⁸ Article 16

²³⁹ Article 63

²⁴⁰ <http://www.agence-nationale-recherche.fr>

²⁴¹ <http://www.ccomptes.fr/Actualites/A-la-une/L-evolution-et-les-conditions-de-maitrise-du-credit-d-impot-en-faveur-de-la-recherche>

The ANR is expected to be mobilized to²⁴²

- Foster creativity, deregulation, emergence of partnerships
- Focus research efforts on economic and societal priorities established at the highest level of the State and in consultation with other stakeholders in research
- Encourage interaction between disciplines
- Strengthen public-private links
- Develop international and European collaborations.

The actions of ANR are mainly focused on the link between the academic and the business worlds. (Because not all calls for proposals since its creation are available online and can be consulted with the help of a search engine, it is very difficult to assess the agency or to obtain details on funded projects whose results are presented as disciplinary aggregates. Moreover, the last available overall assessment is five years old!)

In 2008, a prospective reflection workshop (ARP) was organized on the theme Science and society to strengthen the understanding of knowledge and technology production modes and the role of stakeholders, to develop recommendations in terms of governance, actions and tools.²⁴³

"Indeed, if the domain science and society is at the heart of the social sciences and humanities - which is useful to recall the specific needs - it has inherently, by its social dimension, specificities to be taken into account both at a methodological level and in the governance and implementation of a corresponding research program."

There is an ambiguity about the field "Sciences and Society" as it is not clear if it is here a subject of study or of development. It could be read as if the physical and natural sciences are not or much less affected by the science and society issues. However, nothing has really moved significantly since 2008...

In the last batch of calls for projects 2013, 9 themes are proposed (Biology - health, sustainable energy, environment and biological resources, etc.) but none addresses the relationship between science and society. And calls for projects concerning partnerships deal with industrial chairs and public research organizations - SMEs common Laboratories.²⁴⁴

²⁴² <http://www.agence-nationale-recherche.fr/missions-et-organisation/missions/>

²⁴³ http://documents.irevues.inist.fr/bitstream/handle/2042/25047/sdh_2008_57-58_240.pdf

²⁴⁴ <http://www.agence-nationale-recherche.fr/financer-votre-projet/appels-a-projets-edition-2013/>

In addition, the list of the 9700 experts who contributed to the selection process is published.²⁴⁵ But only the names and countries are mentioned without further information. Difficult if not impossible without spending a considerable amount of time to evaluate the proportion of researchers, industrialists and representatives of CSOs, if there are any. This limited transparency we found too in other organizations or agencies which supplied data but in an almost unusable format (usually scans).

Always in terms of funding, the ANR's Action Plan 2014 has 4 components²⁴⁶, one of which concerning the major societal challenges, including basic research and more targeted research.²⁴⁷

"The societal challenges component will address a wide spectrum, from basic research through targeted research and particularly in partnership with companies.

It will be a unique appeal and it will in particular integrate scientific priorities expressed by the Alliances and the CNRS (Centre national de la recherche scientifique - the French National Center for Scientific Research), and the priorities expressed by industrialists, pole of Competitiveness and other ministries."

Many keywords may suggest that there is a real consideration of society. But we eventually find that nowhere civil society is mentioned. The needs of society are therefore defined by researchers and industry.

Among the instruments proposed in the action plan, the first one relates to individual or collaborative projects. But this collaborative term is actually used for the pooling of expertise and resources from different research teams.

Moreover, when looking at generic projects²⁴⁸ and trying to find the word *participatory* (since the term *collaborative* only applies to research teams), it has to be stated that it is not used but to address the participatory innovation(!) in a chapter entitled "Stimulating Industrial Renewal."

If the ANR is vaguely interested in the theme of "Science and Society", the road ahead is long.

²⁴⁵ <http://www.agence-nationale-recherche.fr/financer-votre-projet/comites/experts/>

²⁴⁶ <http://www.agence-nationale-recherche.fr/financer-votre-projet/plan-action-2014/>

²⁴⁷ <http://www.agence-nationale-recherche.fr/financer-votre-projet/grands-defis-societaux/>

²⁴⁸ <http://www.agence-nationale-recherche.fr/fileadmin/aap/2014/pa-anr-2014-aap-generique.pdf>

The Research Organizations

In 2013, the President of CNRS entrusted the initiator of the PICRI call for project (see below in Funding Mechanisms for participatory research - Regional Level), Marc Lipinski, a mission initially called "citizen science". Since the term has sparked controversy within the institution, the mission has recently been renamed "Science and citizens".

According to Marc Lipinski *"This mission has three short and medium term goals. We will first establish an inventory of innovative actions that aimed, in France and outside of France, to bring closer the worlds of science and citizens. The second objective is to enable initiatives to position the CNRS on this theme, starting in 2013, initiatives that will be taken in consultation with the Institute of Communication Sciences of the CNRS (ISCC) to which this task is attached. Finally and most importantly, my mission is to provide the CNRS devices that will be implemented in 2014 to promote dialogue and reconciliation between research and citizens, mainly represented and organized in associations. The goal is of course to give legibility - and visibility – to the commitment of the CNRS in this area."*²⁴⁹

Although this initiative is welcomed and that there seems to be a genuine interest towards the direction of the CNRS, the results of this mission have to be waited for, including for instance the question how researchers will be evaluated - which is a strong problem for the development of participatory research.

Even if there are specific experiences with the INRA (National Institute for Agronomic Research), the inclusion of civil society in the work and thoughts of this research institute remains sporadic and marginal. These are specific projects dependent on voluntarism of researchers who unfortunately have a lot of difficulties to value their approach within the institute and vis-à-vis assessment bodies. That said recently highlighted issues such as agroecology, which is seen as an engine of ecological transition of agriculture that shows an apparent greater consideration of societal needs. It will be interesting to see how this theme will allow a better openness to society.

INRA since 1993 has also established regional programs "For and on Regional Development"(PSDR) which will be discussed below in the section on incentive mechanisms. There is unfortunately no similar approach to that by CNRS.

Finally, INSERM (National Institute for Medical Research) is a pioneer among research organizations according to relations between civil-society and researchers as this institute es-

²⁴⁹ <http://www.iscc.cnrs.fr/spip.php?article1764>

established in 2004 a mission 'Inserm Associations' that *"implements and coordinates action programs between Inserm and patient organizations, people with disabilities and their families"*²⁵⁰ as well as 'GRAM' (a Focus Group with patients' associations) *"composed of associations of researchers and government representatives from INSERM. GRAM is a place of dialogue and a forum for debate and proposals on strategic directions and action to be implemented to develop policy dialogue and partnership between INSERM and associations."*²⁵¹

Funding Mechanisms for participatory research

Fondation Sciences Citoyennes carried out for Fondation de France an overview of participatory research in France on both practices and its organization. Regarding funding, two kinds of mechanisms have been distinguished: specific mechanisms requiring a partnership on the one hand and simple incentives mechanisms on the other hand.

The Following presentation is extracted from the report published by Fondation Sciences Citoyennes in January 2013²⁵²

Specific mechanisms requiring a partnership

National level

While the Ministry of Higher Education and Research does not focus much on the science/society interface, it is within the Ministry of Ecology that the theme is better received. This is illustrated by the setting up of the REPERE programme (Exchange and Projects Network on the steering of research and expertise)²⁵³

Launched in 2009, following the *Grenelle Environment Forum*, it is a platform for dialogue, proposals and projects exploring the ways of participation of associations leading the challenges of sustainable development to research and expertise. Conducted by the Directorate of Research and Innovation (DRI) of the General Commission for Sustainable Development (CGDD) of the Ministry of Ecology, Sustainable Development and Energy, it aims to increase the participation of associations in the different phases of the production of knowledge: from the direction of research ; during the implementation of research through the provision of knowledge from experience ; during the mobilization of knowledge to contribute to the

²⁵⁰ <http://www.inserm.fr/associations-de-malades/mission-associations>

²⁵¹ <http://www.inserm.fr/associations-de-malades/gram>

²⁵² http://sciencescitoyennes.org/wp-content/uploads/2013/04/FSC_final_recherche-participative_FdF.pdf

²⁵³ <http://www.programme-repere.fr/>

development of expertise. Two calls for proposals, one in 2009 and another in 2011, funded a series of projects, 18 in total. Sharing experiences and knowledge is promoted through the organization of regular seminars. The program's final goal is to produce findings and recommendations for a sustainable integration of associations in research and expertise.

Regional level

As mentioned in MASIS report, the main efforts on science and society issues are to the credit of the regions. Thus three regions have established annual calls for projects requiring a partnership between one or more public research structures and one or more civil society organisations. (see details on page 116)

Partnerships Institutions Citizens for Research and Innovation (PICRI) in Île-de-France²⁵⁴

It is a financial mechanism for a common research work and equal partnership between non-for-profit civil society organisations (associations law in 1901, SCIC) and academic researchers (universities, public research organisms). Funded by the Regional Council and launched in 2005, it was inspired by a Canadian mechanism CURA which Fondation Sciences Citoyennes promoted during the *États-Généraux* of Research in 2004. PICRI's aim at promoting research projects involving an active collaboration between public research laboratories and civil society non-profit organisations in order to produce knowledge together. The regional government expressed a strong political will to strengthen direct and participatory democracy approaches in the region. Therefore the projects have to be of societal interest, have to include a multidisciplinary approach and should focus on a research issues not or almost not funded by universities and research organizations.

Program of Social Appropriation of Sciences (ASOSc) in Brittany²⁵⁵

This program, directly based on the PICRI project, opens its first call for proposals in 2006. The programme seems to move towards the support of action research platforms. The selection committee of the programme was initially composed of elected officials and officers from Brittany region, but given the difficulty of finding available elected people, the technical committee has gradually moved to a group solely composed of regional officers. Concerned regional services are not only of higher education or research but also of agriculture,

²⁵⁴ <http://www.iledefrance.fr/aides-regionales-appels-projets/partenariats-institutions-citoyens-recherche-innovation-picri>

²⁵⁵ <http://xnet1.region-bretagne.fr/Recherche>

sea and solidarity economy. Efforts are made to also have a regional representative of the Agenda 21 pole.

Program"Researchers- Citizens" in Nord-Pas de Calais²⁵⁶

As latest regional funding mechanisms of participatory research, it was launched in 2011 and first funded five projects. The large number of applications received on this first edition was such a surprise for the region that they decided to duplicate the financial envelope for this call, from €300,000 to €700,000 in 2012. Among the stated objective of this call for projects are (besides others) helping civil society to develop a good understanding of scientific approaches by actively engaging in research on topics scientifically validated that may have significant societal benefits and sharing the benefits of this participatory approach with the general public. This call was launched in a changing political context of research and higher education in the region, in particular through the establishment of Regional Conferences on Research and Higher Education in Nord-Pas-de-Calais. It can be noted that at these conferences the Science Shop model was also discussed.

In addition to three regional calls for projects, another regional initiative is to mention.

Program"Citizen and Solidarity-based University"

This programme was implemented between 2009 and 2011 by the Rhône-Alpes region to support initiatives of universities in the Rhône-Alpes Region to open for and promote activities that respond to local and social needs. Its aim is to reduce disparities in access to knowledge and enable a greater social cohesion. This expanded role of the university in the dissemination of knowledge to populations culturally and socially isolated from higher education and research, and to populations geographically remote from major academic centres is the purpose of this funding research program. The aim is to help the university in supporting local actors to resolve economic and social problems they are facing. The projects will be set up from the cooperation between the university and local actors, from the expression of economic and social needs brought by actors among which the social economy is at the forefront"(Source Regional Council). The maximum duration of projects was 18 months.

Note that unlike PICRI, ASOSc and Citizens Researchers'- calls for projects, the project manager must be from a research structure, which follows a different logic to the aforemen-

²⁵⁶ http://www.nordpasdecals.fr/jcms/c_20218//programme-chercheurs-citoyens?profil1=null&profil2=null¢reinteret1=null¢reinteret2=null&textelisteSearch=

tioned regional calls, since this necessarily induces an academic steering. Even if the selection committee must endeavour to verify the quality of the partnership, the laboratory seems rather considered as a kind of the service provider for a social and/or economic demand and not as a partner for a co-constructed project.

Incentive mechanisms

We Identified a number of projects funding mechanisms that do not exclusively require partnerships but offer to value them.

National level

- Program "Ecosystems, Territories, Living Resources and Agricultures"(Systerra) funded by the ANR in 2009 and Following the "Agriculture and Sustainable Development" programme (ADD).
- LITEAU Program

Since 1998 conducted by the Ministry of Ecology, Sustainable Development and Energy (General Commission for Sustainable Development, Department of Research and Innovation), it aims to support finalized research in support of public policies for sustainable development of the sea and coastlines. Over the years, the emphasis was made on interdisciplinary approaches, involvement of actors (institutions, managers, users) and coordination with other national and European programs.

Fondation d'entreprise Hermès

As part of its promoting actions for initiatives aimed at safeguarding the environment and, in Particular, ecosystems, the call for projects "*Biodiversity and Local Knowledge*" foster innovation in the producer-consumer interfaces to support action research in favour of the emergence and the strengthening of initiatives that promote access of local productions to globalised networks (cooperatives, sectors, labels, associations, etc.) based on a recognition of local expertise and know-how approach. Projects are prioritised if they can not be funded through traditional research funding mechanisms (ANR, CE, etc.), and if they promote support to local communities while allowing an assessment of the impact on biodiversity of these approaches.

Fondation de France

Support for participatory Approaches: in the context of the call for projects "manage our environment together", Fondation de France offered an additional funding which consist of a methodological support "Participatory Approaches". The call for proposals, to non-for-profit organisations offers the opportunity for local actors, through the use of an appropriate methodology, to work together for the preservation of their environment or to initiate mediation or prevent or regulate environmental conflicts. It covers two main areas: urban and rural territories on the one hand, the coastal territories on the other hand. The methodological support is *"to finance an external support (diagnosis, adaptation of the project, action plan), training activities or sharing of best practices"*. To encourage co-production projects with so-called *"people in high fragility"*, that funding mechanism can fund a methodological support and the costs related to the mobilization of beneficiaries (*Source Fondation de France*).

Regional level

Pour et Sur le Développement Régional (For and About Regional Development)"for an active cooperation between research and development", PSDR

Initiated in 1993 by INRA, the PSDR programme aims to produce both scientific knowledge on regional development and tools to support reflection and decision-making for people in charge of development (development officers, local Elected Representatives, professionals...). The research is organized in the form of a regional programme consisting of various projects. Yet, there are 7 versions of the PSDR: Aquitaine, Auvergne, Burgundy, Grand West, Languedoc-Roussillon, Midi-Pyrénées and Rhône-Alpes. It is financed 50% by the Regional Council and 50% by INRA (National Institute for Agronomic Research) IRSTEA (National Institute of Science and Technology for Environment and Agriculture) and CIRAD (Centre for Agricultural Research for Development) in regions where these institutes are present. The program's national management is based on a management unit, involving PSDR facilitators from each Region. Meanwhile, a scientific committee evaluates the submitted projects. initially established at the regional level. It is now national and consists of 22 members, all academic scientists.

ARC mechanism - Communities of academic research

Established in 2011 by the Rhône-Alpes region, it aims to foster interdisciplinary research. ARC are divided into 8 themes (e.g. health and environment). A collaboration between a research institute and at least one actor from the socio-economic health or cultural world in

Rhône-Alpes (regional competitiveness clusters, SMEs, museums, heritage libraries, associations...) is required in the thematic call for project "Cultures, sciences, societies and media-tions "but not in the other thematic.

Science Shops²⁵⁷

After a relatively short experience in the 80s and the establishment of a new Science Shop at ENS Cachan in 2005, which has since ceased operations, such projects seem to stop in France. Fortunately, the concept of Science Shops rebounded through three projects of different kinds, two which have received the support from the European Commission through the FP7 project PERARES²⁵⁸.

The oldest is located in Grenoble²⁵⁹. This Science Shop is managed by ADReCA, a CSO created in 2007. Meanwhile the shop really started in 2010. Unfortunately, it is almost entirely based on volunteers which weakens its sustainability.

Lyon Science Shop²⁶⁰ is of an academic nature being attached to the University of Lyon. Its development is provided by the employees of service "science and society" of the university. Its official opening was on 9 December 2013.

The third shop meanwhile is outlined in draft form. A study of foreshadowing for its implementation in the Nord-Pas-de-Calais is funded by the Regional council. The future status of this Science Shop (university based, status as associations, or other) will depend on this study.

The region Pays de la Loire was recently interested in Science Shops. The regional council has indeed ordered in 2013 a study on this subject.

Conclusions

As MASIS report found that most of the concrete efforts in the field science and society is produced in the regions, either through regional specific programs and calls for projects or some facilitating processes such as Science Shops. But on this aspect, there is room for im-

²⁵⁷ <http://www.livingknowledge.org/livingknowledge/science-shops>

²⁵⁸ <http://www.livingknowledge.org/livingknowledge/perares>

²⁵⁹ <http://www.echop-a-sciences.org>

²⁶⁰ <http://www.universite-lyon.fr/science-societe/nouveau-lancement-d-une-boutique-des-sciences-pour-le-site-lyon-saint-etienne-225076.kjsp?RH=PFR-Cul&RF=1374824559314>

provement, as the adventure of Science Shops in the 80s has been forgotten, and replaced by a science policy mainly concentrated on scientific and technical culture, which since has become cultural scientific, technical and industrial. This change in focus clearly shows an increased tropism of research to the business world.

At national level, there is a wide dilution/dispersion of efforts but also a general lack of willingness to develop science and society relations, as well as a lack of coherence due to the fragmentation of the research system. The repeated use of some keywords (partnership, collaboration, openness to society, etc.) is used for very different types of activities (and often exclusively linked to economic Interests), making it difficult to get an overview of the global aims. And anyway it's mainly confined to declarations of intent.

Nevertheless, the Law on Higher Education and Research adopted in July 2013 could give hope to some changes. When considering the participation of society in the regional calls for projects and in official public debates, it can be said that these changes are expected, sometimes with tension, showed by the sometimes sharp interventions of civil society on scientific or rather techno scientific issues (GMO reapers, anti-nuclear protests, etc.).

There is no strong public willingness to fully integrate in all its dimensions the issues of the links between Science and Society

The question of "empowerment" is not addressed in Science and Society relations. Most often, it is a question of restoring confidence and measure while increasing social acceptability of research and innovation and not debating on social projects.

9. Experiences of Incorporating the Needs of CSOs in Research Funding in Spain, Italy and Romania

Spain

The MASIS country report for Spain states²⁶¹: The shortfalls of vocation in the Spanish science system have led the Spanish government (encouraged by the scientific community itself) to consider the need for a new legal framework. And so, after a long process, on May 7, 2010 the preliminary draft of the so-called New Science Law was passed²⁶², officially being approved on MAY 12, 2011, replacing the one passed in 1986. This law was conceived to address to the main outstanding challenges in the Spanish science and innovation system.

Spanish society, with its little tradition in participating, with a relatively young democracy and a scientific system that is beginning to show results but still envies its neighbours, have participated very little in the debate on the role of science.

The creation of the Ministry of Science and Innovation in 2008 constituted a further and decisive boost to the commitment to promote the transition to a more knowledge-intensive, diversified and innovative economy in all sectors. This Ministry was created with the objective that Spain will be one of the world leaders in research, development and innovation; capable of confronting, in better stead, the economic, social and environmental challenges of a continuously changing world with citizens likely to be involved in scientific activity and the spirit of enterprise with strong and dynamic research institutions and a more innovative business sector. MICINN develops effect policies at the service of science, technology, the business sector, but also generates the necessary confidence in stakeholders and citizens.

The Spanish Foundation for Science and Technology (FECYT)

In 2001, the Spanish Foundation for Science and Technology (FECYT) was created by the Council of Ministers. Its mission is to support scientific and technological activity in Spain and to increase society's interest in research developments. The *raison d'être* of this Foundation is to popularise and communicate science. The FECYT is part of the Ministry of Science and Innovation and it is responsible for popularising and communicating science and innovation.

²⁶¹ <http://www.masis.eu/english/storage/publications/nationalreports/masisnationalreportspain/>

²⁶² Draft of Science, Technology and Innovation Law On May 7th 2010, the first draft of the Law was passed, replacing the 1986 one
www.micinn.es/portal/site/MICINN/menuitem.29451c2ac1391f1febebed1001432ea0/?vgnextoid=6ba4259e8e5f6210VgnVCM1000001d04140aRCRD

National Program for the Promotion of Scientific Culture and Innovation

For over six years, the Ministry responsible for research included a specific programme in the Spanish National R + D + I Plan that aims to spread science among the population. Since 2007, the programme has been managed by FECYT, the Spanish Foundation for Science and Technology. In 2009 and 2010, it had a budget of around €4 million and took part in around 1,300 projects per year. This programme gives many universities and research centres, NGOs, city councils and other bodies that specialise in disseminating science and innovation, a good chance to obtain resources for the dissemination and communication of science and innovation.

However, Spanish citizens are not consulted and their opinions are not taken into account in making decisions on science and technology although the formal participation of citizens in decisions about science and technology is governed by the same principles and regulatory frameworks as for any other sector. For example, "popular initiatives" can be handed in to some parliamentary bodies to propose a measure that is considered appropriate, if it has a sufficient number of signatures.

Although in Spain the discussion of "upstream" as opposed to "downstream" public engagement on science is almost non-existent (or reduced to circles of professionals that work in organizations for the promotion of science), a recent initiative needs to be explained.

Citizens' Agenda on Science and Innovation 2010

On the occasion of the Spanish Presidency of the European Union during the first half of 2010, and with the support of the Ministry of Science and Innovation of Spain, the Spanish Foundation for Science and Technology (FECYT) launched an initiative with which, according to its organizers "European citizens are to be able to send to the highest representatives of science and innovation in Europe what challenges should be facing in these two areas by 2030."

This initiative received 107,309 votes and has not having achieved the level of proposed participation. Nevertheless, this initiative, taken as an experiment rather than a genuine act of public participation in the process of science, has undoubtedly been relevant and one of the objectives of FECYT is to work on it with other stakeholders to make it into a new channel for public participation in the areas of science, technology and innovation.

Research embedding Science in Society issues

There is no specific programme for the study of Science in Society in Spain. Because of that, the research carried out in Spain on public understanding of science, governance of science, science policy, science education, science communication, women in science or ethics in science and technology, often must be included in programs that do not have these issues as

major but secondary. In some cases, this research could also be conducted thanks to European projects on SiS.

Apart from the **National Program for the Promotion of Scientific Culture and Innovation** by the Central Government some regional administrations also offer similar programs (Galicia, Catalonia, etc.).

Programa RecerCaixa. Obra Social La Caixa Foundation is a private foundation that belongs to the main Spanish financial entity. This institution has always had a special sensitivity for promoting relations between scientific research and society

Citizen - or Civil society organisations initiatives

In Spain there are no major initiatives organized by civic organizations in the field of public communication in science. Legally-established civic associations and NGOs may, like any other body, submit applications in the Call for Applications within the National Programme for the Culture of Science and Innovation. In the 2010 call for applications, 29 science popularisation projects were awarded to civic associations and three to NGOs, representing 11% of all the 269 projects awarded.

In preparation of this report we contacted The Spanish National Research Council (CSIC). The CSIC, encompasses over 130 centres and institutes, and is bound to make a significant contribution to the advancement of science and to play a role in activities of both national and international relevance. Accordingly, the CSIC participates in nineteen Spanish University Campuses of International Excellence as sponsoring partner / collaborator. CSIC had a budget of 860 Mio euro in 2011 and conducted 2.640 research projects²⁶³. CSIC has its commitment with science dissemination written in its statutes. Activities are focused on students vocations, teacher's training, general public and local environments without access to science resources. Citizen participation projects performed under the headline Science and Society are science communication and outreach projects. CSIC sees itself as recipient of funds for projects which in big parts come from the Ministry of Economy and Competitiveness.

²⁶³ <http://www.csic.es/web/guest/datos-sobre-el-csic>

Italy

The MASIS country report for Italy states²⁶⁴: Generally speaking, the overriding goals and priorities for policy in Italy at the moment are clearly attempts to stimulate economic development and to stabilise public finances. Other priorities goals are to simplify bureaucratic procedures and re-form public administration, to foster competitiveness, and most importantly for the purposes of this report, to effect a complete overhaul of the entire Italian education system and public research institution.

The National Research Council (CNR²⁶⁵) is a public organization with the mandate to promote, extend, transfer and improve research activities in main sectors of knowledge and of its applications for the scientific, technological, economic and social development of the Country²⁴. Founded in 1923 and became a public in 1945. In 2003 the CNR became a public research organisation with the aim of "creating value for the country through the competences of scientific research"²⁶⁶. Internal organisational re-structuring has been underway since then, the CNR counts around hundred institutes and 11 interdisciplinary departments²⁶. About 70% of the funding comes from institutions of the Italian state while the CNR manages to attract the remaining funds from elsewhere. As in other areas of science and technology in Italy attempts are being made to raise further funds from the private sector.

National Research Plan (PNR) is the main instrument available to the Italian government in order to stimulate and develop the guiding lines and to coordinate research activities in the whole country. The PNR for 2010 – 2012 has recently been published²⁶⁷.

The advance of the foundations

The Italian Institute of Technology - IIT – in Genoa was created with the objective of promoting Italy's technological development and higher education in science and technology through organisational structure novel to this country. IIT is a private law Foundation founded through a special Government Law in 2003²⁶⁸. IIT is making an effort to implement its scientific programme in this context, with the specific goal of integration between basic scientific research and the development of technical applications.

²⁶⁴ <http://www.masis.eu/english/storage/publications/nationalreports/masisnationalreportitaly/>

²⁶⁵ www.cnr.it/sitocnr/Englishversion/Englishversion.html

²⁶⁶ www.miur.it/0006Menu_C/0012Docume/0098Normat/3260Riordi_cf3.htm

²⁶⁷ www.miur.it/0006Menu_C/0012Docume/0098Normat/3260Riordi_cf3.htm

²⁶⁸ www.parlamento.it/parlam/leggi/decreti/03269d.htm and www.parlamento.it/parlam/leggi/03326l.htm

The formalization of procedures to involve citizens in decision making and policy processes is very a relatively recent development in Italy and all level of administration, the state, the regions, the provinces and the municipalities. The increased involvement of citizens in decision making in knowledge intensive policy decision making goes hand in hand with an increased openness to include stakeholders in policy making processes in general.

Italy has a strong and a long standing tradition of civic engagement through citizens associations and the voluntary sector. In 2007 *Fondazione Diritti Genetici*⁵⁰ in collaboration with other actors ably drew upon this tradition to reignite the debate over genetically modified organisms with the aim to take the debate further for the simple reason that the science has progressed on this front over the last decade. The political impact was rather clear even if the national mass media somewhat ignored the issue. An important development over the last decade has also been the increasing role played by patient groups in shaping the political agenda in matters of biomedical science and research.

As the Regions are increasingly gaining autonomy they also have the opportunity to set their own innovation agendas that reflects the strength and tradition of each region. In many cases this means setting up *Foundations* (Fondazione), institutions designed to accommodate and manage funds from both public and the private sector. Of many other very interesting example *Toscana Life Sciences*²⁶⁹ set up in the Region of Tuscany at the end of 2004 to oversee activities in Life Sciences in the region by fostering collaboration between actors on in the territory and by providing a range of new instruments to foster development and innovation. Although not strictly speaking a regional initiative *la Fondazione Umberto Veronesi*²⁷⁰ is an excellent example of a very successful public private interaction.

On the whole, the science in society scene in Italy is really dynamic and innovative when it comes to action, that is to say to organise and promote activities that facilitate the dialogue between science on society and what can be generally described as engagement activities but when it comes to conducting empirical research the picture changes drastically. That might, however, be due to the lack of institutional mechanisms that would help in making such research activities more visible and accessible to the outside community.

²⁶⁹ www.toscanalifesciences.org

²⁷⁰ www.fondazioneveronesi.it

Trends in research

There seems to be have been a shift in recent years focusing away from a focus on issues of understanding, educations and communication towards a greater interest in ethical issues in a wide sense. Science in society has not quite emerged as a research field or a stream for funding in its own right in Italy but ethical issues are of high concern and perhaps the most notable trend is how ethics as the main focus of research has moved well beyond the disciplinary boundaries of philosophy to include first of all law and more recently social sciences including anthropology, sociology and psychology.

CSSC Centre for Science, Society and Citizenship, a leading independent research centre specializing in advice on political, ethical and social issues raised by emerging technologies²⁷¹. The research of this centre is interesting as not only does it have an European focus but moreover is very active in collaboration that involves the Mediterranean and non European culture, in areas such as international public health and Science for Peace.

In Naples the Fondazione IDIS Città della Scienza²⁷² that has been very active promoting new forms of interaction and dialogue between science and society and has also been an important player in research projects.

Funding of research

There is national funding available for activities aimed at promoting the diffusion of scientific culture in Italy.⁸⁴ These funds are intended for exam-ple to the organisation "La settimana scientifica"(The week of science) that is organised every year through the regions.

Fondazione Cariplo

In preparation of this report we contacted Fondazione Cariplo²⁷³, which describes itself as one of the world's main philanthropic organizations, which manages the assets gathered over 180 years by Cassa di Risparmio delle Province Lombarde to carry on its long-standing philanthropic tradition. Fondazione Cariplo aims at operating on the basis of the principle of subsidiarity, anticipating needs and fulfilling its special mission of being a resource that helps social and civil organizations better serve their community. For Fondazione Cariplo charities and stakeholder are involved in the design of funding schemes. Hearings are organised which aim at defining a needs analysis. The foundations also carries out every 3/5 years Foresight Analysis for the anticipation of needs that are not yet detected. In some cases,

²⁷¹ www.cssc.eu/index.php

²⁷² www.idis.cittadellascienza.it/

²⁷³ <http://www.fondazionecariplo.it/en/the-foundation/index.html>

within special programmes in the field of medicine, patient's associations are involved as critical friends on the board of trustees during the project's selection process.

Fondazion Cariplo has 500.000 Euro/year budget for these activities from the director's fund and is able to raise some funds of their Observatory. They are also involved in policy making i.e. on Human Capital in their region where they launched a public and private programme with an annual budget of 8 M €.

In the opinion of **Carlo Mango** *Head of Scientific Research and Tech Transfer* (and in charge of the entire cycle of strategic planning, programme design and management of Fondazione Cariplo's research, education and technology transfer initiatives) good policies are based on good rationales. He thinks it's very important to influence policy makers on the basis of robust "proofs of concepts" offering them the possibility to match evident or latent needs. The key factors of success are independency, robust methodologies, absence of conflicts of interests and 'no prejudices'

Romania

The MASIS country report for Romania describe²⁷⁴s: Before 1990, state driven research and innovation was financed exclusively from the state budget, with precise allocations to each and every institution, along with precise instructions about what research topics were to be investigated. This system did not immediately change after the fall of communism, but its rapid decrease and poor transfers to the economy required an important reform.

The first change took place in 1995, when research institutes were faced with simultaneous budget cuts and a new system of competition based research, where original ideas were awarded financing through research grants, with evaluation criteria directed towards scientific performance.

The development of new research policies, finally collated at the end of 2006 in the publication of two important documents:

A) The National Strategy for RDI, 2007-2013²⁷⁵,

B) The National Plan for RDI, for the period 2007-2013 (PN-II)²⁷⁶

These documents were officially adopted and legislated by the Romanian Government in 2007 (the same year that Romania adhered to the European Union), with the purpose of setting strategic objectives and long term development directions for the RDI system:

- Create knowledge through cutting edge, internationally competitive, scientific and technological results
- Increase the competitiveness of the Romanian economy by stimulating RDI activities and transfer its results in the economy
- Increase the quality of life by developing technological solutions to generate direct benefits over the society

From the specific objectives, it is worth mentioning the fourth:

- Consolidate the role of Science in Society by communicating science, promote ethics and develop the dialog between science and society

For this later objective, the PN-II has a special module dedicated to disseminating the scientific research results (especially those with high economic and social impact) in the mass-media, to inform the public about the mission of the research and its progress.

According the latest sociological research, the public involvement in the civil society (measured as voluntary activity for non-official or Government related institutions) is rather poor,

²⁷⁴ <http://www.masis.eu/english/storage/publications/nationalreports/masisnationalreportromania/>

²⁷⁵ http://www.mct.ro/img/files_up/1188316504strategia%20eng.pdf

²⁷⁶ www.mct.ro/img/files_up/1188313586PN2%20eng.pdf

which is an understandable reaction to the state induced, forced collectivisation in the communist years. As a consequence, the contribution of the civil society to the creation of science related policies and decisions was also poor.

Based on evaluations, the degree of democratisation in Romania is assessed as high: citizens are consulted and their opinions are considered in S&T decision making. Academic staff, business community, civil society representatives, together with policy makers have contributed to the elaboration of the National Strategy which is a programmatic document where the major objectives are pointed out in the sector of RDI over the period 2007-2013.

Several panels of experts have been created as long as civil society is asking to commit itself to the participatory process of European present and future major challenges. Such that there are group of experts, having regular meetings with officers in charge with scientific issues from central and regional administrative bodies.

Trends in research

Romania is a place where (in theory) science has always had a dominant role in the functioning of the society. Opposed to the religious way of life, the communism taught people that life, work, mater, in fact pretty much everything can be studied scientifically. For this reason, science was highly valued, for even the leading of the society could and should be done scientifically. They were convinced that existence is based on fundamental laws, and that it was only a matter of time when these laws were to be discovered in order to further the development of the society.

Twenty years after the fall of communism, the current situation is Romania still shows a very high proportion of people that strongly trust science and research: science can solve all the problems that people face, if they have it and if they know how to use it. On the other hand, the level of scientific literacy is rather low.

Where scientific answers are not available, religion is taking place quite instantly. This relationship between religion and science is important (as a new trend for research) because, given that people lead themselves by faith, one of the weak points in social sciences is the low understanding of how these mechanisms are developed. It is also linked with how people learn how to learn.

The political approach in science will not be changed at the top level but probably the implementation process can lead to some changes

Funding for Science in Society Research

The only funding programme specifically directed towards Science in Society is the Capacities Program, based on the National Strategy for RDI and subsequently in the National Plan II for RDI (PN-II). Projects to be funded are dedicated to the public research organizations.

The Executive Agency for Higher Education, Research, Development and Innovation Funding in Romania

In preparation of this report we contacted The Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI) which describes itself as a public entity of the Central Administration under the ultimate authority of Ministry of Education, Research, Youth and Sport (MoERYS). UEFISCDI is a political institution driven by political goals. UEFISCDI is the body implementing four out of six programmes of the National Plan for Research Development and Innovation 2007-2013. All programmes are national focused and thematic limited. Funding priorities are:

- Human Resources (exploratory research)
- Ideas (exploratory research)
- Partnerships in Priority S&T Areas (applied research)
- Innovation (innovation and technology transfer)

The R&D Programme "Partnerships in Priority S&T Areas" is structured in nine thematic areas, similar to FP7:

- Information and Communication Technology
- Energy
- Environment
- Health
- Agriculture, food safety and security
- Biotechnologies
- Innovative materials, processes and products
- Space and security
- Socio-economic and humanistic research

Type of beneficiaries in this programme were:

- RES: Research (i.e. organisations only or mainly established for research purposes)
- HES: High Education (i.e. organisations only or mainly established for higher education/training, e.g. universities, colleges)
- LE: large enterprise i.e. larger than SME (i.e. industrial organisations private or public, both manufacturing and industrial services)
- SMEs: entities with < 250 employees and annual turnover ≤ € 50 million or annual balance sheet total ≤ € 43 million)
- NGOs & public bodies

As examples of closed 2011-2012 programmes can be mentioned:

- Cooperation Programmes between Romania and other European countries (e.g. Switzerland, France)
- Complex Exploratory Research Projects (PCCE)
- Exploratory Research Projects (PCE) (only for R&D unit or institution)
- Young Research Teams Grants (TE)
- Postdoctoral Grants (PD)

Applications on UEFISCDI are mainly made by RESs and HESs. The CSOs are focused mainly on social science research or desk research (see for example <http://terraiii.ngo.ro/index.stm?apc=gp-r0x1--&l=e>). There are also Professional Associations that are applying for research funds, but because they do not have research facilities, they are joining RESs or HESs in applying for funds.

To receive funds in the most of the programmes the organizations have to be Romanian R&D units or institutions. A legal framework for the partner usually is required (see Eligibility Criteria at page 4 of <http://www.cncs-nrc.ro/wp-content/uploads/2012/03/Information-Package.pdf>). For the science projects, more restrictions apply for the Project Leader. He has to be from the host institution. This gives only little chance for a CSO to be in the leading position of a funded project.

The official statistic²⁷⁷ shows that 5% of the total participants in the last national Partnership Call (spring 2013) were non-governmental organisations. The list of the project proposals that will be financed is not yet published, therefore a similar statistic for financed CSOs is not available.

As a new tool, the European Commission proposed the introduction of pre-conditions (ex-ante conditions) that all Member States will have to fulfil and which could potentially lead to the suspension of funding. Therefore their fulfilment should represent a priority for Member States. They are linked to the effective and efficient use of EU funds. It will influence the implementation of specific programmes to be financed under the next programming period.

If ex-ante conditionalities are not fulfilled by the time the Partnership Agreement (PA) is submitted, EU countries will need to present the European Commission with an action plan and a timetable for implementation. Ex-ante conditions must be fulfilled no later than 31 December 2016 (or within two year following the adoption of the PA).

There are two types of conditions:

- Conditions linked to the direct implementation of the policy: which would take the form of both 'ex ante' conditions that must be in place before funds are disbursed and 'ex

²⁷⁷ UEFISCDI, Statistics Regarding Calls (<http://uefiscdi.gov.ro/>)

post' conditions that will make the release of additional funds contingent on performance.

- Conditions linked to macro-economic conditions.

The R&D ex-ante condition is “the existence of a national or regional smart specialisation strategy in line with the National Reform Programme, to leverage private research and innovation expenditure, which complies with the features of well-performing national or regional research and innovation systems”²⁷⁸ with two criteria for fulfilment: the existence of a national or regional smart specialisation strategy and a framework outlining available budgetary resources for research and innovation has been adopted.

The new Romanian Research, Development and Innovation Strategy 2014-2020 and the Research, Development and Innovation Strategy Plan should be adopted by the end of 2013 in order to fulfil the requirements of the ex-ante conditions. The preparation of a national research and innovation strategy for smart specialisation as an integral part of an industrial policy, valorising national fields of excellence and comparative advantages, reflecting demand-driven inputs is an important task for the Romanian Research Council. A draft version of this strategy was not available at the time of finalising this document but it is expected that it will involve stakeholders from “governmental bodies from different departments and governance levels, business, research, education, civil society, social partners, etc.”²⁷⁹ including CSOs.

²⁷⁸ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions: Europe 2020 Flagship Initiative Innovation Union (COM(2010) 546 final of 6.10.2010). Commitments 24/25 and Annex I "Self-assessment tool: Features of well performing national and regional research and innovations systems". Conclusions of the Competitiveness Council: Conclusions on Innovation Union for Europe (doc. 17165/10 of 26.11.2010).

²⁷⁹ http://ec.europa.eu/regional_policy/what/future/pdf/preparation/part2_guidance_ex-ante_conditionalities_guidance.pdf

10. Other experiences with research with or for civil society and its organisations

The Community-University Research Alliances programme (CURA)²⁸⁰

In 1999, the Social Sciences and Humanities Research Council (SSHRC)²⁸¹ launched a programme that would allow community-based organizations to receive funding—for the first time in SSHRC's history—in order to carry out research in true partnership with Canadian universities. SSHRC is a federal agency created in 1977 to promote and support university based research and training in the social sciences and humanities. It is governed by a twenty-two member advisory council and reports to Parliament through the Minister of Industry. Its "Grants and Scholarships" budget (\$306 million Canadian for 2006-2007) is allocated on the basis of recommendations from peer-review selection committees. Today, close to 100 of these Community-University Research Alliances (CURA) have been funded and more than 900 non-academic organizations have helped SSHRC push the boundaries of traditional scholarship, while building critical knowledge on the important social, cultural and economic issues facing Canadian communities.

The specific CURA funding opportunity is no longer offered, because research in partnership has now been 'mainstreamed' and is possible throughout SSHRC's research funding (e.g. "Insight"; described further below).

Objectives

The purpose of the CURA programme was to support the creation of alliances between community organizations and postsecondary institutions which, through a process of ongoing collaboration and mutual learning, will foster innovative research, training and the creation of new knowledge in areas of importance for the social, cultural or economic development of Canadian communities. Specific objectives were to:

- Promote sharing of knowledge, resources and expertise between postsecondary institutions and organizations in the community;
- Enrich research, teaching methods and curricula in postsecondary institutions;
- Reinforce community decision-making and problem-solving capacity; and

²⁸⁰ <http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/cura-aruc-eng.aspx>

²⁸¹ <http://www.sshrc-crsh.gc.ca/society-societe/community-communite/index-eng.aspx>

- Enhance students' education and employability by means of diverse opportunities to build their knowledge, expertise and work skills through hands-on research and related experience.

A CURA was based on an equal partnership between organizations from the community and one or more postsecondary institutions; and provided co-ordination and core support for planning and carrying out diversified research activities that reflect the CURA programme objectives, were centred on themes/areas of mutual importance to the partners and are closely related to their existing strengths.

Each CURA's activities included:

- A research component (short-term and long-term projects, action research, etc.);
- An education and training component (in the context of research projects, apprenticeships, activities credited as part of coursework, etc.); and
- A knowledge-mobilization component (workshops, seminars, colloquia, policy manuals and other publications, public lectures, etc.) that meets the needs of both academic and community partners.

The project partners jointly defined a CURA's research activities as well as the participatory arrangements under which individual researchers and research teams carried out those activities. The partners continued to develop and refine the research activities and, in addition to strengthening the original alliance, where necessary, also recruited new partners during the period of the grant. In each CURA, the partners jointly defined and brought together one or more academic disciplines in order to target one or more research themes or areas. Examples included: youth, poverty, culture and the arts, tourism and recreation, First Nations issues, socialization, integration of persons with disabilities, violence, the aging population, globalization, social justice, local and regional economic development, community capacity, social indicators, cultural heritage management, religion and society, gender issues and environment and sustainable development. Successful applicants were eligible for a development grant of up to \$20,000. An individual CURA could have received funding of up to \$200,000 annually for up to five years to cover non-physical infrastructure costs for the support and co-ordination of the research teams and for carrying out some of the research activities. All CURAs were expected to seek funding from sources other than SSHRC to help support their research activities.

Organizations from the community sector included public, community or other organizations that were active in social, economic or cultural fields relevant to the CURA's research and training objectives. Not-for-profit organizations without research capacity were encouraged to create alliances with researchers from established research institutions, in order to explore the possibility of collaboration. Anyway, this funding opportunity is no longer offered.

Outcomes

Official evaluation reports noted that CURAs were innovative and dynamic, and that the different projects have allowed to organise and implement complex and innovative research programs, in line with their initial vision. CURAs have created a context favorable to the participation of students to various projects, and for them to get the necessary experience and skills to work on community-based research Community-Based Research. CURAs have fostered the mobilization of knowledge towards participants and strategic sectors, thanks to various tools and mechanisms to share knowledge, resources and expertise. Evaluations also show that CURAs have created a favorable context for the improvement of capacity and decisional processes of communities, and for their capacity to influence social and cultural policies. CURAs have successfully improved the capacity of communities to take decisions and to resolve conflicts, but there is few data on the improvement of the capacity of universities to work with communities and to meet their needs. More detailed descriptions of the CURAs and outcomes of this funding programme can be found in the STACS report²⁸².

Other SSHRC funding programs

With the **Insight**²⁸³ programme SSHRC intends to build knowledge and understanding about people, societies and the world by supporting research excellence. The objectives of the Insight programme - besides other - are to fund research expertise that relates to societal challenges and opportunities and mobilizes research knowledge, to and from academic and non-academic audiences, with the potential to lead to intellectual, cultural, social and economic influence, benefit and impact. Insight Development Grants support research in its initial stages. The grants enable the development of new research questions, as well as experimentation with new methods, theoretical approaches and/or ideas. Funding is provided for research, research training and knowledge mobilization initiatives involving a formal partnered approach among postsecondary institutions, or between the academic and public, private and/or not-for-profit sectors. They can be disciplinary or interdisciplinary, and can include both Canadian and international partners.

²⁸² Science, Technology and Civil Society - Civil Society Organisations, Actors in the European System of Research and Innovation (STACS) was a capacity building project funded by the EU 6th Research Framework Programme, as part of the Science in Society activities aimed at stimulating participation of civil society organisations (CSOs) in research activities. http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2011/12/STACS_Final_Report-Partic.research.pdf

²⁸³ http://www.sshrc-crsh.gc.ca/funding-financement/umbrella_programs-programme_cadre/insight-savoir-eng.aspx

PICRI (Ile de France), ASOSc (Brittany) and Chercheur-Citoyens (Nord-Pas de Calais)

Partenariats institutions citoyens pour la recherche et l'innovation (PICRI) (see also page 101, French Experiences)

The PICRI programme – Partnerships of Institutions and Citizens for Research and Innovation—has been existing since 2005²⁸⁴. It is a financial mechanism for a common research work and equal partnership between non-for-profit civil society organisations (associations law in 1901, SCIC) and academic researchers (universities, public research organisms). Funded by the Regional Council and launched in 2005, it was inspired by a Canadian mechanism CURA (see page 119) which Fondation Sciences Citoyennes promoted during the *États-Généraux* of Research in 2004.

It aims at promoting research projects involving an active collaboration between public research laboratories and civil society non-profit organisations in order to produce knowledge together. The regional government expressed a strong political will to strengthen direct and participatory democracy approaches in the region. Therefore the projects have to be of societal interest, have to include a multidisciplinary approach and should focus on a research issues not or almost not funded by universities and research organizations.

The initial budget of €1.2 million, increased to €1.5 million in 2012, allows the funding of 10 to 12 projects per year. The budget has fluctuated over time with a low of less than one million in 2006 (eight Funded projects).

PICRI projects are eligible for funding of up to 50,000 euros per year, over a period of 1 to 3 years, renewable up to a maximum of 6 years. These funds have to cover operating costs, equipment and / or staff (including doctoral and post-doctoral research grants), excluding salaries of tenured staff of the public laboratories. PICRI partners were encouraged to seek additional sources of funding when possible but it is not a condition for being elected.

Since the regional base is one important selection criteria, many projects involve actors also from beyond regional borders or from other countries. The selection committee includes on one side academics and the other side representatives of associations. Catherine Bourgain, who represented the Fondation Sciences Citoyennes as a member of the selection committee of the 2012 call for projects, wrote a feedback²⁸⁵ in which she noted that special care was paid to a real co-construction in order to find and reject "sock puppet associations" used by researchers to submit a project to the call. The scientific quality of the projects was also a major criterion for not making PICRI a "discount" call for projects.

²⁸⁴ <http://www.iledefrance.fr/recherche-innovation/dialogue-science-societe/>

²⁸⁵ <http://sciencescitoyennes.org/evaluer-des-projets-picri-retour-dexperience/>

In total 790 projects have been funded up to now, 35 are under progress in 2013. What is surely decisive in the story of PICRIs is the fact that admitted projects are financed 100% by the mechanism. This is of extreme importance for CSOs since almost all of them suffer from restricted budgets. The PICRI programme has been adopted by two other French regions, Bretagne and Nord Pas de Calais. In 2006, the regional government of Bretagne launched a call entitled "Action pour l'appropriation sociale des sciences" (ASOSC - Action for the social appropriation of sciences²⁸⁶), offering up to 20.000 Euro per year to a maximum of 75% of the costs. The call was introduced by the following sentences: "In order to encourage the construction of a real knowledge society, the region thinks it necessary to play an active role in the appropriation of sciences by civil society and in the development of relations between the scientific community and citizens. Already numerous actors of civil society (CSOs, unions, citizens groups), often scattered and disposing of few means, develop their own expertise in scientific domains touching their daily life. They constitute the "scientific third sector", complementary to institutional research."²⁸⁷

The PICRI programme is thus far from being a major political instrument of the regional research policy. This may also explain why there was so little political debate concerning the introduction of PICRIs as a new financial instrument. More detailed descriptions of the PICRI programme of this funding programme can be found in the STACS report.

Program of Social Appropriation of Sciences (ASOSC) in Brittany²⁸⁸

This program, directly based on the PICRI project, opens its first call for proposals in 2006. The programme seems to move towards the support of action research platforms.

The selection committee of the programme was initially composed of elected officials and officers from Brittany region, but given the difficulty of finding available elected people, the technical committee has gradually moved to a group solely composed of regional officers. Concerned regional services are not only of higher education or research but also of agriculture, sea and solidarity economy. Efforts are made to also have a regional representative of the Agenda 21 pole.

Concerning the selection criteria, scoring was divided equally between the quality and originality of the project, the size and regional interest (outcomes and impacts on society, the environment, the economy), partnership (degree of involvement of stakeholders) and the budget (its coherence and balance between the different partners).

²⁸⁶ http://www.bretagne.fr/internet/jcms/preprod_55964/asosc-appropriation-sociale-des-sciences

²⁸⁷ Science, Technology and Civil Society - Civil Society Organisations, Actors in the European System of Research and Innovation (STACS): http://www.livingknowledge.org/livingknowledge/wp-content/uploads/2011/12/STACS_Final_Report-Partic.research.pdf

²⁸⁸ <http://xnet1.region-bretagne.fr/Recherche>

The National Observatory of Local Agenda 21 and local practices for sustainable development, offers an interesting analysis of ASOSc programs, particularly in terms of challenges and pitfalls: *"The number of submitted projects remains low and is declining (25 projects submitted in 2006, the year of the establishment of the mechanism, 13 submitted in 2010). This can be explained by the following factors:*

- Inadequate dissemination of the concept of social appropriation of science in social and academic fabric and little practice to use action research approach to solve practical issues. When the mechanism was created, a number of researchers and societal actors have been already familiar with these approaches for several years waiting for a regional support. They immediately seized this funding opportunity, but have not subsequently been relayed by researchers and societal actors newly converted to the concept. All which led to a gradual depletion of the supply of projects.
- Slow appropriation of ins and outs of the project: action research is a concept that needs time to be understood.
- Some reservations about the approach: for some researchers and scientific institutions, action research is not the "real" research because it does not lead to "A rank" publications (this has yet to be demonstrated). It is therefore significant to maintain a high level of scientific rigor in funded projects under this mechanism to not see ASOSc considered to be devoted to second class research."

This decrease is however to be relativised when we consider that during the first few years a number of projects was simply ineligible, probably due to the newness of the programme and the resulting "call effect". The proportion of ineligible projects fell in 2011 to zero. They accounted for one-third of the projects submitted in 2006.

Program Chercheur-Citoyens (Researchers - Citizens) in Nord-Pas de Calais²⁸⁹

As latest regional funding mechanisms of participatory research the region Nord-Pas de Calais - implemented a programme called Chercheur-Citoyens (Researchers - Citizens) in 2011. As PICRIs and ASOSCs, this device provides funding for research where public laboratories and non-profit associations co-produce knowledge. It offers a maximum of 50.000 Euro per year for a maximum funding period of 3 years. The large number of applications received on this first edition was such a surprise for the region that they decided to duplicate the financial envelope for this call, from €300,000 to €700,000 in 2012. Eight projects were funded in

²⁸⁹ http://www.nordpasdecals.fr/jcms/c_20218//programme-chercheurs-citoyens?profil1=null&profil2=null¢reinteret1=null¢reinteret2=null&textelisteSearch=

2012. It's important to note that the regional presence is highly valued here. The stated objective of this call for projects are:

- Promoting the exchange of knowledge, resources and skills between higher education and research institutions, research organisms and associations ;
- Enriching the questions, the research programs and research themes of higher education and research institutions ;
- Increasing the expertise and/or innovation capacities of civil society ;
- Enriching the training and future "employability" of students, PhD students and teachers by involving them in multi-group research and "field" projects ;
- Helping civil society to develop a good understanding of scientific approaches by actively engaging in research on topics scientifically validated that may have significant societal benefits ;
- Share the benefits of this participatory approach with the general public.

This call was launched in a changing political context of research and higher education in the region, in particular through the establishment of Regional Conferences on Research and Higher Education in Nord-Pas-de-Calais. It can be noted that at these conferences the Science Shop model was also discussed.

11. European Commission: Research with, for and on CSOs

Research organisations (ROs) and CSOs can both benefit a great deal from working together. There are a number of factors, however, that hinder closer collaboration between the two. For many ROs, for example, engaging with CSOs and the wider public is viewed as an 'extra-curricular activity', and researchers are not always rewarded for such work. Furthermore, application forms for research funding are configured for ROs, and are not really suited for the kind of contributions CSOs make to projects.

The Science in Society (SIS) Programme

This programme aims to promote research's engagement with society and vice versa. As a follow-up to the Commission staff working paper of November 2000 'Science, Society and the Citizen in Europe'²⁹⁰, which established the basis for the debate on the relationship of science and technology with society, the European Commission published a Communication on 4 December 2001 setting out the Science and Society Action Plan making the 'Science and Society' theme under Structuring the ERA in the Sixth Framework Programme (FP6) the first ever initiative of its kind on a European scale. The initiative helped increase awareness among research and industry of the need to bring a range of research-related societal issues to the top of the policy agenda. The role of the Science in Society (SIS) Programme now is more important than ever before. Its many activities represent the variety of responsibilities that this role encompasses; from better governance practices and more effective communication methods to the pursuit of a more diverse and robust science workforce in Europe.²⁹¹ Science with and for Society has a budget of approximately 400 million Euro in Horizon 2020.

A major development in the Science in Society funding scheme of **the European Commission** has been the launch of longer-term Mobilisation and Mutual Learning Action Plans (MMLs) since the 2010 Work Programme. The effective involvement and engagement of society in tackling the many challenges being faced requires mechanisms that facilitate cooperation between a diverse range of actors with different types of knowledge. MMLs are designed to bring together actors from research and the wider community (e.g. civil society organisations, ministries, policymakers, science festivals and the media). They collaborate on action plans that connect research activities for a chosen Societal Challenge. These plans encompass a series of SIS actions, such as public engagement, investigating ethics and governance, two-way communication, women in science, and science education. The emphasis is on mo-

²⁹⁰ ftp://ftp.cordis.europa.eu/pub/rtd2002/docs/ss_en.pdf

²⁹¹ <http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1221>

bilising all relevant actors and on mutual learning in order to pool experiences and better focus their respective efforts on finding solutions that develop and use scientific and technological knowledge in the public interest.²⁹²

The MML funded under the 7th Framework Programme are **PERARES**: *Public Engagement with Research And Research Engagement with Society* (www.livingknowledge.org/livingknowledge/perares), **SiS-Catalyst**: *Children as Change Agents for the future of Science in Society* (www.siscatalyst.eu/), **GAP2**: *Bridging the gap between science, stakeholders and policy makers Phase 2: Integration of evidence-based knowledge and its application to science and management of fisheries and the marine environment* (www.gap2.eu), **EJOLT**: *Environmental Justice Organisations, Liabilities and Trade* (www.ejolt.org/), **PACITA**: *Parliaments and Civil Society in Technology Assessment* (www.pacitaproject.eu/), **R&Dialogue**: *Research and civil society dialogue toward a low-carbon society* (www.rndialogue.eu/), **INPROFOOD**: *Towards inclusive research programming for sustainable food innovations* (www.inprofood.eu/) and **SFS**: *Sea for Society* (<http://seaforsociety.eu/>).²⁹³

VOICES (Views, Opinions and Ideas of Citizens in Europe on Science) was a 1 year long EU funded project with very innovative and challenging objectives. VOICES aimed at running a Europe-wide public consultation initiative, but also at providing valuable know-how on methodological and procedural aspects for the structural employment of citizens participation in defining the European research agenda in the framework of Responsible Research and Innovation. The action was a pilot focused on “Waste as a Resource” within the Societal Challenge “Climate action, resource efficiency, raw materials” of Horizon 2020 and introduced a citizen dimension in the preparation of the Horizon 2020 Work Programmes for 2014.²⁹⁴

CONSIDER (Civil Society Organisations in Designing Research Governance)²⁹⁵

The CONSIDER project is not part of the BSG-CSO funding scheme but aims to explore how Civil Society Organisations can be involved in research projects. This includes a survey of all EU FP7 research projects as well as a number of case studies. The objective is to develop a model of CSO participation that will allow for the development of recommendations for policy makers, researchers, CSOs and other stakeholders. It is led by academics from De Montfort University (DMU) in Leicester.

²⁹² <http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1226>

²⁹³ http://ec.europa.eu/research/science-society/document_library/pdf_06/list-of-mml-projects_en.pdf

²⁹⁴ http://www.ecsite.eu/activities_and_resources/projects/voices

²⁹⁵ <http://www.consider-project.eu/>

Starting with the assumption, the knowledge base underpinning CSO involvement in research is extremely thin the project intends to strengthen the related knowledge foundation to support the development of a research governance structure capable of accommodating CSO involvement effectively. The project intends to foster the understanding of *how* CSOs are currently participating in EU-funded research – to what extent, in which roles, for what purposes and to what effect. In a rigorous investigation of unprecedented scope, and is now mapping these parameters of engagement and analysing their underlying assumptions. The models being identified should allow to evaluate research outcomes more efficiently and provide contextualised guidelines for CSO participation moving forward.

The CONSIDER project's research is still in the data collection and analysis phase. Their interim findings are based on the results of two surveys which covered all FP7 projects and were aimed at gathering essential information about participation of CSOs in EU-funded research. Survey one was sent to 14,000 FP7 project coordinators.

From CONSIDER's findings²⁹⁶ the role of CSOs in research projects is perceived very differently by academic institutions and the CSOs themselves, e.g. regarding who is initiators of research projects (higher within CSOs), This reflects a tendency among project coordinators to attribute a more passive role to CSO participants. Even though CSOs are routinely invited to academic conferences and project meetings, they are valued primarily for their expertise and their network; academic partners value CSO participation insofar as it facilitates dissemination of results and helps test developments.

CSOs are not conceived as central actors in FP7 projects because there are few incentive schemes designed for CSOs participation. The Seventh Framework Programme does not seem to be very appealing for CSOs involvement in research projects. But both CSOs and research project coordinators expect the outcome of FP7 projects involving CSOs to enhance scientific knowledge and help inform decision makers, with CSOs placing slightly greater emphasis on the latter.

CSO members also identify industry as a central beneficiary of research projects they are involved in. In addition CSO participation in the FP7 research projects privileges an institutionalised professional type of civil society organisation over grass roots activists. Anyway both project coordinators and CSO members tend to be skilled and experienced.

Their recommendations ask for a clarified definition of CSOs, as e.g. even organisations that could be considered CSOs in research projects are not aware of the term and also researchers and other participants tend not to know the term.

²⁹⁶ http://ec.europa.eu/research/science-society/document_library/pdf_06/optimising_civil_society_participation.pdf

The CSO roles have to be differentiated as current discourses around CSOs can be read as suggesting that CSO participation in research is an unconditional good. In order for CSO involvement to be positive, expected benefits need to be more clearly defined. This can influence the choice and role of CSOs.

Where CSO participation is desired, funding schemes and calls have to be adapted accordingly. In those cases where CSO participation is warranted, research schemes and calls should be designed in such a way that CSO characteristics can be accommodated. Participation procedures should be simplified and administrative obstacles minimized.

Identify and share Examples of good practice should be identified and shared because most actors in research projects are not aware of options and models of such involvement. Participants have voiced a desire for mechanisms that allow them to share good practice, exchange experience and communicate about different options.

BSG – CSO scheme²⁹⁷

The funding scheme Research for the Benefit of Specific Groups – Civil Society Organisations²⁹⁸ was introduced in 2007 under the Seventh Framework Programme (FP7) to allow CSOs to actively take part in Calls for Proposals. It aims to develop scientific knowledge related to CSO activities in order to contribute to public debate, and invites CSOs and ROs to form partnerships and combine their knowledge. Specifically, the funding scheme aims to:

- allow CSOs to find scientific responses to their needs;
- provide researchers with new inputs and perspectives for their activities;
- contribute to enriching public research agendas;
- broaden public access to scientific results.

BSG – CSO can be made available in specific Calls for Proposals. When CSOs require scientific knowledge in a field covered by one of these calls, they source appropriate ROs to prepare a joint project. If the proposal is accepted, ROs and CSOs then combine their knowledge to conduct the planned activities.

In addition to research activities, training, debates and dissemination activities can be supported through the scheme. The maximum funding rates of eligible costs vary according to the type of activities: research and technological development (RTD) (50% or 75% for non-

²⁹⁷ <http://ec.europa.eu/research/science-society/index.cfm?fuseaction=public.topic&id=1298&lang=1>

²⁹⁸ http://ec.europa.eu/research/science-society/document_library/pdf_06/bsg-cso-scheme_en.pdf

profit public bodies, education establishments, non-profit research organisations and small and medium-sized enterprises (SMEs)); and management, training and dissemination (100%).

CSO Engagement with Ecological Economics (CEECEC)²⁹⁹

CEECEC is a European Commission FP7 funded project (Capacities-SiS, 2009-2010) that aims to enable Civil Society Organisations (CSOs) to engage in and lead collaborative research with ecological economists. The overall focus is not on theory but on case study learning, whereby CSOs and academics will identify and explore key issues for research in areas such as water management, mining, energy, forestry and agriculture, based on CSO needs and interests. The CEECEC project arose out of a combination of concerns: growing demands from civil society organisations (CSOs) for access to expertise in practical application of ecological economics (EE) as a "science of sustainability" to their work, and at the same time out of concern from within the European and international research communities that the principles and tools of ecological economics were rather inaccessible to the general public. CEECEC aimed to build CSO capacity to engage in research in ecological economics, encouraging cooperative research between CSOs and ecological economists for the benefit of policy-making. Key to the CEECEC approach was recognition of the large stock of practical knowledge held by CSOs on environmental-economic issues, and the combination of CSO and research efforts to co-develop language, approaches and tools for collaboration.

FAAN - Facilitating Alternative Agro-Food Networks: Stakeholder Perspectives on Research Needs³⁰⁰

FAAN is a European Commission FP7 funded project (Capacities-SiS.2007, Co-operative research, Collaborative Project, 2008-2010) that put into practice 'co-operative research' among five national teams, each comprising an academic institution and a civil society organisation (CSO), in order to analyse how current policies and other factors facilitate, hinder or shape the development of Alternative Agro-Food Systems. They focused on Local Food Systems (LFS) in Austria, England, Hungary, France and Poland, by reference to relevant national policy and a number of case studies. The main objective was to analyse how current policies facilitate, hinder or shape their development in order to elaborate recommendations how policies could better facilitate LFS. The full five-country team then brought the results together, and assessed their implications for policy and practice at European, national and regional levels.

²⁹⁹ <http://www.ceecec.net/>

³⁰⁰ <http://www.faanweb.eu/>

FAAN served as a 'social experiment' aimed at designing, testing and evaluating a European-level 'co-operative research' (CR) process in practice to reveal potential benefits and limits of this process. CR refers to co-production of knowledge by different actors, implying a different 'framing' of the research by broadening the perspective on the issue through upstream engagement in designing the research. We did so in line with the concept of transdisciplinarity, involving close co-operation between academics and CSOs during the entire project; and also in line with participatory research through the involvement of other relevant stakeholders at certain stages of the project. Based on our experiences, we conclude the CR process needs to establish mutual understanding as a basis for integrated knowledge production.

Co-operative Research on Environmental Problems in Europe (CREPE)³⁰¹

The CRÊPE project (FP7-SiS, co-operative research) ran from 2008 to 2010 bringing together civil society organisations (CSOs) and academics to investigate agri-environmental issues. The project concluded in December 2010. It aimed at strengthening the capacity of civil society organisations (CSOs) to participate in research, while engaging with diverse perspectives and expertise – thus facilitating co-operation between researchers and non-researchers, as well as between academics and CSOs.

Personnel budgets allowed CSOs to allocate substantial time for the systematic study that they led. They gained better knowledge about the specific topics, which all had policy relevance, as a basis for partners to intervene in those issues. Some concepts from CSOs (e.g. agrofuels and agroecology) were turned into research agendas, thus strengthening the concepts. The project identified and elaborated synergies across various agro-environmental issues which involve accounts of sustainable development. The research process facilitated mutual learning between non-researchers and researchers; both categories included CSOs.

The project structure facilitated research cooperation of many kinds. Through cooperation between the academic Coordinator and CSO partners, each built its own capacities for joint research, with mutual learning from the process. CSO networks were involved and extended in the specific studies, especially via workshops, so that the analysis would be more relevant to their perspectives. The research process gained better access to people's local experiences, as a basis for linking local, European and global levels of agro-environmental issues. These linkages enriched critical perspectives on dominant innovation agendas and prospects for alternative pathways for sustainable agriculture.

³⁰¹ <http://crepeweb.net/>

Appendix 1 Overview on Interviewed Organisations

UK

Arts and Humanities Research Council (AHRC)
Big Lottery
Biotechnology and Biological Sciences Research Council (BBSRC)
Economic and Social Research Council (ESRC)
Engineering and Physical Science Research Council (EPSRC)
Higher Education Funding Council for England (HEFCE)
National Co-ordinating Centre for Public Engagement (NCCPE).
Nuffield Foundation
Research Councils UK (RCUK)
Wellcome Trust

Ireland

Atlantic Philanthropies
Department of Foreign Affairs
Department of Children and Youth Affairs
Forfas, the policy advisory board for enterprise, trade, science, technology and innovation
Health Research Board (HRB) were also interviewed.
Higher Education Authority (HEA)
Irish Research Council (IRC)
Science Foundation Ireland (SFI)

The Netherlands

Athena Institute, VU University Amsterdam
Dutch Cancer Society
KENNIScoCREATIE
Kennisklik, Universiteit Tilburg
Ministerie van Onderwijs, Cultuur en Wetenschap (Ministry of Education)
Netherlands Organisation for Health Research and Development (ZonMw)
Koningin Willemmina Fonds
Responsible Innovation (MVI)

Science System Assessment of Rathenau Institute

Stichting DOEN

Germany

Apfelbaum Foundation – Partners for a Growing-Together of the Living Environment

Baden-Württemberg-Foundation

Civil-societal Platform 'Change Research'

Community Foundation for the town of Kassel and its administrative district

Eco-Institute

Friends of the Earth (BUND), Daimler-Benz Foundation

GEKKO Foundation

German Environmental Foundation (DBU)

German Research Foundation (DFG)

German University Foundation

Hamburg University, Competence Centre for a sustainable university

Hans-Böckler-Foundation

Helmholtz-Community (Helmholtz-Centre for Environmental Research)

Institute for Ecological Economic Research (IÖW)

Institute for Socio-Ecological Research (ISOE))

Konrad-Adenauer-Foundation

Leibniz-Community (Leibniz-Institute for Zoological and Wild Animal Research)

Michael Foundation – foundation for epilepsy

Ministry for Innovation, Science and Research of the State of NRW

Ministry for Science, Research and the Arts, Baden Württemberg

NRW Foundation for Environment and Development (SuE)

Robert-Bosch-Foundation

Wuppertal-Institute for Climate, Environment, Energy