

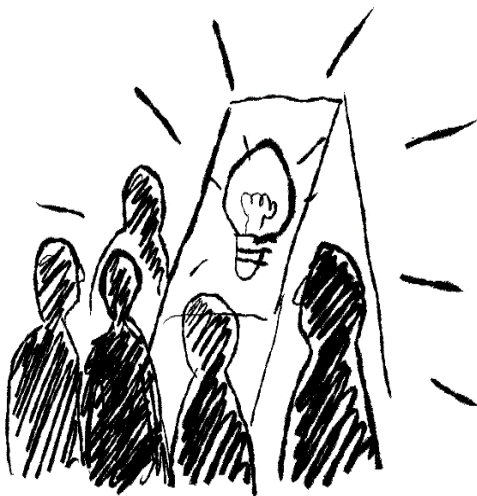
Current Praxis of Policies and Activities Supporting Engagement in R&I – Trends, Needs and Barriers

The current policy brief is the third one out of six that will be published during the Engage2020 project. It discusses measures that can be introduced, strengthened or further developed to achieve good-quality outcomes of engaging society in the R&I process, as well as barriers that could hamper societal engagement.

The Engage2020 consortium conducted an extensive review of policies, instruments and activities that support societal engagement in research and innovation (R&I) in Europe and beyond. This research effort resulted in a comprehensive “Report on Current Praxis of Policies and Activities - Supporting Societal Engagement in Research and Innovation”, available for download at www.engage2020.eu. The report identifies trends, needs and barriers to societal engagement that need to be addressed in order for societal engagement to achieve its intended outcomes as well as policies, instruments and activities that can help overcome the barriers and improve the uptake of engagement practices.

IDENTIFIED TRENDS AND NEEDS

Societal actors can be engaged at different phases of the R&I policy formation process, such as engaging citizens in formulating future policy directions, entrusting citizens with the right for a direct legislative proposal, or consultation in regard to specific policy measures, to name just a few. Besides public engagement in R&I policy formulation, citizens and stakeholders can also be engaged in the R&I processes



Graphics by: Edward Andersson

themselves, e.g. by gathering data for scientific research. The benefits of public engagement are numerous, but the major ones are: i) it improves the democratic aspect of science governance; ii) it improves scientific research results as well as the relevance of policies by including societal knowledge, ideas and capacities in research and increasing the knowledge base for policy making. There are a few key components that need to be put in place, strengthened or further developed to achieve the intended results of engaging society in research and innovation processes. These are:

➤ **Suitable environment and infrastructure for citizen engagement**

To make societal engagement in R&I processes successful, strong partnerships between the various stakeholders as well as proper structures and mechanisms need to be built. By including EU citizens in policy making processes, the citizenry in general can develop a sense of ownership of the proposed solutions which in turn could strengthen EU's ability to address the Grand Societal Challenges. In addition, this would allow citizens to chart a course towards the kind of Europe in which they wish to live now and in the future. Suitable environments improve the coordination between, and the support of, different parties in the R&I field. An example of a network that facilitates the cooperation between citizens and the research community is *the living Knowledge Network*.

➤ **Strong national and regional funding and incentive mechanisms for engaging citizens in research and innovation activities**

There are many examples demonstrating that meaningful societal engagement could be achieved by using proper incentives. The incentives may serve as a stimulus for societal engagement in R&I for scientists who otherwise would not be compelled to do so. A relevant example described in the report is the research funding agency called *Social Science and Humanities Research Council of Canada (SSHRC)*, which

seeks to fund research projects focused on improving the quality of life for all citizens.

➤ **Non-conventional funding mechanisms**

Although there are some funding mechanisms for research and innovation activities that enable citizen engagement at both European and national level, project partners could find only few activities supported by non-conventional funders (e.g. unions, consumer interest groups, charities). If more of these organisations are encouraged to take leadership and support researchers and innovators to engage citizens at any of the four levels of the research and innovation process (namely policy formation, programme development, project definition and R&I activity) significant progress can be achieved in citizen engagement. The UK charity *Welcome Trust*, which has been described in the report, serves as a good example in this regard. It aims at improving health by funding biomedical research. It was announced to be the United Kingdom's largest provider of non-governmental funding for scientific research and one of the largest providers in the world in the field of medical research.

➤ **Use of citizens' input in decision-making processes**

Despite the numerous attempts to engage citizens in decision-making processes in the field of R&I, if there is no evidence that citizens' inputs are taken into account when formulating the respective policies, citizens might get discouraged and less prone to participate in further engagement activities. As noted by Emery et al.¹ "there is a paucity of published evidence to demonstrate the impacts on policy of public engagement (PE) in science and technology. This might represent the failure of PE to achieve policy impacts, or, alternatively, indicate a lack of effective procedures for discerning the uptake by policy-makers of PE-derived outputs".

➤ **Targeted communication and information delivery**

Many governments have turned to internet for engaging citizens in research and innovation processes. However, using digital instruments to engage citizens can have both negative and positive effects. One of the advantages is that it may encourage the youth to take part in research and innovation activities and processes. Moreover, the opportunity to engage citizens online has contributed to the further

development of citizen science projects. With regards to the drawbacks, there exists a threat of excluding a large part of the population from the online engagement processes because they are not able to use a computer or do not have internet connection. There is also the possibility for citizens to prefer to be engaged in more traditional ways. In order to cope with these issues, a communication strategy is needed which targets population based on their lifestyle, preferences and literacy level in order to achieve widespread impacts of citizen engagement.

➤ **Monitoring and evaluation criteria**

This element is an important part of public engagement in R&I processes. By engaging societal actors in projects and activities, researchers can learn what works well, what should be avoided, and what can be replicated to maximise the impacts of engagement practices. Pilot studies, interim and final evaluations are important as they may provide essential information on the progress of projects and allow for changes in the process, where needed, to ensure success and widespread impact. Although not many examples of monitoring and evaluation can be found, the *Interim evaluation and assessment of future options for Science in Society actions* can serve as such. It is a study for the European Commission aiming to evaluate the results and impacts of FP7 projects and assess the future options for Science in Society actions in the EU, thus, to improve the understanding of the role of science and technology in society and promote the development of an ethically sound and responsible European science system.

➤ **Cultural change**

The report identifies a trend towards policies which aim to reshape the engagement culture. The synthesis report of the MASIS programme² highlighted the culture of science communication as a key determinant of whether or not countries performed well regarding the interactions between science and society. Three different groups of science communication cultures were identified across Europe – consolidated, developing and fragile. The shift of focus towards changing organisational culture is most visible in countries with consolidated culture. An example for one such initiative can be seen in the UK where in 2012 the Research Council UK focused its efforts on making engagement a sustainable practice within universities by promoting culture where public engagement is seen

¹ Steven Emery, Henk Mulder, and Lynn Frewer, accepted for publication in *Science, Technology, and Human Values*, 2014

² European Commission, "Monitoring Policy and Research Activities on Science and Society in Europe – Final synthesis report" (MASIS), 2012

as awarded and recognised in the research realm. Similar interventions are also needed in countries where engagement practices are less common. The European Commission can play a major role in providing support and encouraging cross-country learning in this respect. Policies and interventions which aim to restructure the way academic and research organisations work and the cultures within which they operate need to be formulated in order for societal engagement to reap the benefits it could bring.

BARRIERS TO SOCIETAL ENGAGEMENT

It can be claimed that societal engagement favours research and innovation policies and activities by increasing public trust in policy makers and political institutions, making research and innovation more democratic and accountable, and improving societal utility of innovative products, technologies and services to meet societal needs and expectations. In order to take advantage of such benefits, science and society need to be bridged. Therefore, it is important to identify the gaps and barriers that hinder such practices and to take measures to overcome these. Some possible barriers to societal engagement are:

➤ Time and resources

To make societal engagement in R&I processes successful, sufficient resources and time need to be available. Funding for engagement activities is often insufficient as are time and resources that could improve access to engagement opportunities for societal actors. Engagement processes can be regarded by researchers as time-consuming and costly, which sometimes may discourage them to engage citizens if they do not have sufficient resources. An obstacle is also the lack of institutional support for scientists willing to engage members of the public in their research. Weak connections between funding agencies and CSOs, as well as lack of dedicated funds for public engagement in R&I activities can also hamper proper societal engagement. Thus, **providing institutional support to researchers willing to engage societal actors in R&I activities, allocating dedicated funds to public engagement and improving the communication and collaboration between civil society organisations and funding agencies** are measures which can successfully promote public engagement in R&I processes and activities.

➤ Lack of training and skills

Researchers and policy makers often lack adequate skills and training to allow them to make meaningful and widespread engagement possible. Societal engagement in R&I is a complex process and is new for many societal actors. There are some challenges that may need to be overcome, such as the sometimes unclear role of engagement processes with regards to formal democratic decision making procedures, or the lack of awareness by researchers of what the interests of the public are. What is needed in order to cope with these challenges is to **provide training, support networks, disseminate information and education to lay people and empower them to participate**. It can be concluded that in order to produce a good-quality outcome and ensure informed participation proper training as well as sufficient knowledge and information on matters of research and innovation need to be available.

➤ Culture of engagement

The current culture in the majority of academic and research organisations hampers the progress and success of public engagement in R&I. Currently, interaction with the public is not rewarded in the innovation and university systems. A shift is needed in this regard. **Scientists need to be rewarded not only on the basis of the number of publications in "high impact factor" scientific journals but also on whether people affected by their research and innovation activities are actively involved in the process**. The non-inclusion of public engagement metrics in the formal evaluation of scientists and research institutions acts as a demotivating factor for engaging the wider society in R&I. **Science and policy institutions** could go a step further to **establish stronger ties and cooperation with CSOs, such as patient or environmental safety organisations**. However, societal engagement should not be compulsory as this may result in making public engagement a "tick box" exercise which will decrease the quality of engagement. A new culture of engagement within research institutions based on mutual trust and commitment to addressing the Grand Societal Challenges of our time and which values the engagement of societal actors in research and innovation activities, is thus needed.

➤ Infrastructure

Existing **infrastructure, such as science shops and centres of excellence, facilitates societal engagement. Networks and collaborations among researchers and societal actors** such as CSOs **boost engagement**

activities as well. Lack of proper societal engagement infrastructure hampers the coordination and collaboration among researchers and societal actors, which can be a serious barrier to engagement activities.

➤ **Evaluation**

There is little publically available data or information on evaluations of societal engagement in research and innovation activities. There is general lack of creditable outcome-based evaluations of public engagement initiatives that assess the soundness of the achieved outcomes. **Evaluations of the benefits societal engagement has had on research and innovation activities and processes need to be conducted and made public.**

The European institutions have already taken significant steps to facilitate the engagement of society in research and innovation activities. National initiatives are equally important in this regard. While progress has been made, more needs to be done in order to encourage the collaboration and partnerships between researchers and the general public in addressing societal problems. To address the barriers to societal engagement, the current policy brief suggests the following range of measures:

- provide institutional support to researchers willing to engage societal actors in R&I activities; allocate dedicated funds to public engagement; improve the communication and collaboration between civil society organisations and funding agencies;
- provide trainings; support networks of researchers; disseminate information to lay people and empower them to participate;
- reward scientists not only on the basis of the number of their publications in scientific journals but also on whether people affected by their research and innovation activities are actively involved in the process;
- set up infrastructure, such as science shops and centres of excellence, which facilitates societal engagement; establish networks among researchers and societal actors to boost engagement activities;
- conduct and publish evaluations on the benefits societal engagement has had on research and innovation activities and processes.

ABOUT ENGAGE2020

Engage2020 is a project funded by the European Commission (DG Research) that looks at research, innovation and related activities, and explores how members of society are involved today and, perhaps more importantly, how they could be involved in the future. The project maps how, where and why members of the public, stakeholders, consumers and other groups are being engaged in the research process, from early policy development to the delivery of research activities.

The core ambition of Engage2020 is to increase the use of engagement methods and policies by mapping what is practiced and to spread awareness of the opportunities amongst researchers, policy makers and other interested parties.

To learn more about the project, its deliverables and partners involved, visit the website <http://www.engage2020.eu>. For further inquiries, please contact the project coordinator or any of the partners in the Engage2020 consortium.

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