Science-policy interfaces from a communication perspective
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Introduction

Science-policy interfaces encompass the relationship between scientists and other actors who are actively involved in policy processes. This relationship is deemed desirable since the interaction between scientists and other policy actors allows for exchanges, co-evolution and joint construction of knowledge that is assumed to result in more robust and more legitimate policy decisions (van den Hove 2007). In reality, however, the interaction between scientists and other policy actors is problematic. One of the reasons can be associated with the traditional role of scientists in policy-making: scientists traditionally participate in policy debates indirectly, as chief scientific advisors, through membership in expert advisory committees or through preparation of written scientific reports. They are often not present when policy proposals are discussed in stakeholders’ policy forums. Consequently, there is a lack of direct communication between scientists and other policy actors what contributes to two problems.

First, the underrepresentation of the scientific community in stakeholders’ policy forums causes scientific data to be sometimes neglected by policy-makers. Policy-makers are busy people, and therefore rather prefer direct face-to-face communication instead of reading long scientific reports (Weiss 1989; Sorian and Baugh 2002; Lavis, Robertson et al. 2003; Brownson, Royer et al. 2006). Second, the lack of direct involvement of scientists in stakeholders’ policy forums sometimes results in misinterpretation and/or misuse of scientific claims. A number of case studies have demonstrated how arguments supported by scientific claims were selectively used by different policy actors to advance their own interests (Nelkin 1975; Martin 1988; De Greef 2004; Maasen and Weingart 2005; Gottweis 2008).

Against this background, this paper speculates about potential re-organisation of science-policy interfaces to facilitate more active involvement of scientists in stakeholders’ policy forums, and thus enable direct communication between scientists and other actors involved in policy processes. The paper builds on a premise that the active participation of scientists in stakeholders’ policy forums is a necessary condition for enabling exchanges, co-evolution and joint construction of knowledge which is important for achieving more robust and more legitimate policy decisions.

The paper is divided in two parts. In the first part, the evidence pointing towards the possibility to consider a re-organisation of science-policy interfaces is provided from literature and...
public surveys as well as from some real-life examples. The second part of the paper points out the research gap which currently exists in the available literature regarding facilitation of active engagement of scientists in policy-making.

Re-organisation of science-policy interfaces: the evidence from literature, public surveys and real life examples

The proposal to involve scientists more actively in policy debates is not a new one. The possibility of involving scientists actively in policy debates has been long discussed by scholars in environmental science, public policy, life sciences, conservation biology, sociology as well as in science technology and society studies. The well-recognised framework which addressed the advocacy role of scientists in policy debates was proposed in the late 1980s by French political scientist Paul Sabatier. The advocacy coalition framework focused on policy change over time and its particular interest was in the role policy analysis plays in policy change (Sabatier 1988).

As a part of the advocacy coalition framework Sabatier suggested that each policy system has a subsystem which is represented by actors who are actively concerned about a policy problem or an issue. He articulated that these actors come from different backgrounds and he considered scientists as being one of the groups which are likely to participate in these subsystems because scientists possess special skills and knowledge.

The concept of epistemic communities proposed by Peter Haas in the early 1990s also touched upon the advocacy role of scientists, although such a role for scientists was not articulated directly. The epistemic community was defined as a network of professionals with recognised expertise and competence in a particular domain. Haas assumed that what bonds members of an epistemic community is their shared belief in the applicability of particular form of knowledge (Haas 1992). The epistemic community approach focused on the process through which consensus is reached within a given domain of expertise and what influence epistemic community can have on policy-making.

Kelly Moore also studied the advocacy role of scientists in policy-making. She closely examined three public interest scientific organisations which emerged after the Vietnam war in the United States as a response to a disagreement among scientists about the danger of atomic fallout. The objective of these organisations was to demonstrate scientists’ social responsibility as well as to address misconceptions about science which were presented to public by non-scientific interest organisations (Moore 1996).

The literature presented above suggests that scientists are likely to engage in policy-making through membership in advocacy coalitions or through creation of scientific organisations when they share beliefs or concerns about certain political developments. Some real-life examples illustrate that this possibility also exists at the EU level.

Public Research and Regulation Initiative (PRRI) is an organisation of scientists established in 2006 with an objective to involve public sector scientists in regulatory discussions regarding green biotechnology. PRRI offers a forum for public sector scientists to be informed about as well as to be involved in the international discussions and negotiations relevant to biosafety where PRRI believes that these can influence the conduct of scientific research. Today more than 300 scientists are actively involved in PRRI (www.pubresreg.org).
Sense about Science presents another example. Sense about Science is a scientific network which shares concerns about the presentation of scientific claims to policy-makers, journalists as well as general public(s). The organisation is active in a number of different scientific domains and has more than 5,000 members today (www.senseaboutscience.org).

Additionally, the Eurobarometer surveys from 2005 and 2010 indicate that scientific organisations in general and the public sector researchers in particular are perceived by European publics as best qualified to explain the impact of scientific and technological developments on society. There is even a slightly increasing trend with regards to trust in these institutions between 2005 and 2010 (Eurobarometer 2005; Eurobarometer 2010).

**Research gap**

Despite the supporting evidence described above, the current literature on science-policy interfaces is limited mostly to a question whether an active involvement of scientists in policy-making is desirable or not. Limited empirical research exists which examines concrete cases on how scientists can actively engage in stakeholder policy forums and which communication strategies are suitable to facilitate communication between scientists and other stakeholders involved in policy debates. The authors have therefore started a project focusing on the identification of typology of involvement of scientists in the EU policy debates with a particular focus on different communication strategies used by scientists and their effectiveness in facilitating the integration of science into European policies and regulations. The results are expected to show best examples and identify conditions which are necessary to be met for desired scientists’ involvement in policy.

**References**


