



From interfaces to alliances: a shift in how we do science and policy

The Brief in brief

Silo mentalities and myths continue to prevail and hinder the development of more effective science-policy interfaces (SPIs). The SPIRAL project identified a number of ways to better design, maintain and improve science-policy interfaces. Realising improvement, however, will depend on a complete shift in how we perceive the science and policy domains and their intersection. We need to move from “science-policy interfaces” to alliances where policy and science know each other and act together for improved research and decision-making.

Setting the scene

We know that improved **science-policy interfaces¹ are needed and beneficial**. Practice and research have demonstrated that well-designed SPIs can²:

- Allow for dynamic exchange and co-evolution of scientific and policy knowledges;
- Contribute to the scientific quality control process;
- Facilitate timely and coherent input of research into policy options or advice;
- Facilitate rapid uptake of research results by stakeholders;
- Alert decision-makers and other stakeholders about emerging issues and new perspectives;
- Ensure strategic orientation of research in support of policies and societal issues;
- Raise public awareness of research and societal issues;
- Raise willingness to act and to support policy amongst the public and stakeholders.

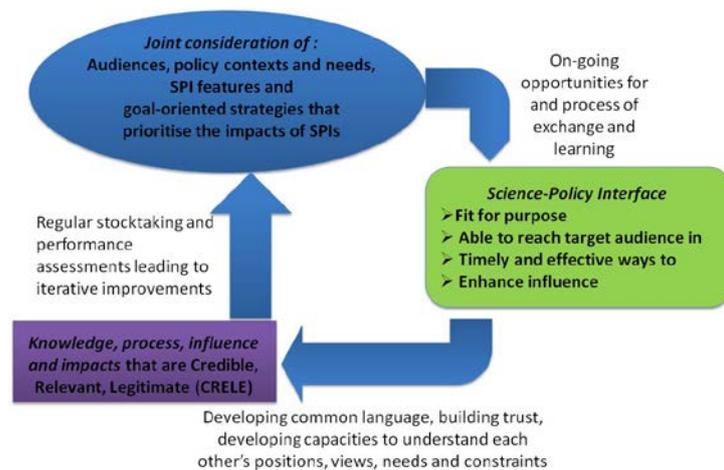
Although ‘no one size fits all’ in SPIs, we know what features can lead to more successful SPIs³. For example, we

¹SPIs are the many ways in which scientists, decision makers and others link up to communicate, exchange ideas, and jointly develop knowledge to enrich policy and decision-making processes and/or research.

² van den hove, S., Chabason, L. (2009) The Debate on an Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES): Exploring gaps and needs. Idées pour le débat N° 01/2009, Iddri, Paris, on-line at: www.iddri.org

³ See companion SPIRAL brief “Key features of effective SPIs” available at <http://www.spiral-project.eu/content/documents>

know there should be joint consideration of context and ongoing opportunities for learning, leading to fit for purpose and effective SPIs that build understanding and trust to produce credible, relevant and legitimate processes and outcomes, which can be improved through iterative processes (see figure below).



We know, however, that some **SPI initiatives continue to be inefficient and/or insufficient**. This is because some of those involved in SPIs unconsciously follow and perpetuate the **myths** that:

- Science and policy are two independent domains;
- SPIs are about a one-way flow in which science speaks simple ‘truth’ to ‘power’ (policy);
- SPIs are simple forums through which reporting of unequivocal scientific knowledge leads to the development of policy through optimisation, in clear, controllable and unproblematic ways.

These myths, combined with a lack of systems thinking, continue to be fuelled by and lead to **silos mentalities**. In addition to these problems in the way we think about SPIs, there are also institutional barriers. For example, science career structures do not necessarily reward collaboration beyond disciplines or with policy-makers, whilst different policy teams also find it hard to integrate across sectors and collaborate with scientists. The reasons why this happens are well known: working beyond silos is hard work, time-consuming, takes us outside our comfort zone and is rarely rewarded.

Moving beyond myths and silos

SPIs depend on the interest and commitment from individuals and teams, therefore improving and making resources available for such dialogue will require systematic and systemic organisational-level support in both science and policy arenas.

Incentives

Incentives for scientists and policy-makers to engage with each other are insufficient. There is a need for increased

resources and incentives from institutions and funders to recruit train and encourage both scientists and policy-makers to engage efficiently with each other and with counterparts from other disciplines, as well as with the media and popular audiences. Organisational support for these staff could be aided by the development of organisations' communication and interfacing strategies, particularly if these strategies included an explicit recognition of the need for greater engagement of scientists and policy-makers. In addition, an acknowledgement and promotion of boundary roles and tasks would help to break the silo thinking in science and policy and enhance cross-domain communication.

Aligning research and policy agendas

Not all research will be directly policy-relevant, and conversely some research will prove unexpectedly relevant. Discussing research and policy issues together can lead to identification of potential points of connection, and common shared problems, such as policy "problems" that require a new approach. This can lead to research designs adapted to, and engaged with, relevant policy-making, which, when regularly discussed with policy, can lead to relevant outputs. This will require decision-makers who are transparent about their policy needs, and open to discussion about the formulation and answering of questions.

Transparency

The science community often admits not knowing how policy-makers acquire information, and, in turn, how to feed their research into the policy-making process. Increased transparency with regards to routes into (and from) policy-making would be beneficial. Equally, there needs to be transparency on routes from policy to research. Support for such initiatives within organisations and from funders is essential.

Inter- and trans-disciplinary research

The way in which research is commissioned should be adapted to promote inter-disciplinarity to provide more robust and credible knowledge. Although the rhetoric of funding of research projects is increasingly putting an emphasis on interdisciplinarity, all too often, different disciplines working on the same project actually focus on their own 'sub-projects' with little interaction between groups of different disciplines. Funding focused on cross-cutting issues could help and could be fostered through mechanisms that require groups that would not normally come together to do so, e.g. EU research programmes, multi-funder thematic programmes and, potentially, the research that will be triggered by the Intergovernmental Platform for Biodiversity and Ecosystem Services (IPBES)⁴. Policy mainstreaming should also be encouraged, for example by seeking and promoting governmental mandates for various policy sectors to take biodiversity and ecosystem services into account, and also through "multi-domain" working groups that include both scientists and policy makers from various fields and sectors.

There is little doubt that science needs to be more visible and its processes better understood, not just by the policy communities in terms of developing effective policies, but by society as a whole. This is necessary to justify and

encourage continued funding towards the scientific research that is essential to the transition to sustainability. Scientists, as key knowledge-holders, are well placed to make the scientific process and its potential role in ensuring a sustainable future for our societies more visible. 'Indirect' science-policy-society links, via actors other than scientists and policy-makers (e.g. NGOs, civil societies, businesses) who shape the way research is carried out and contribute to policy processes are also of crucial importance.

Strategic and long-term science-policy dialogues

Lack of coordinated planning between science and policy can lead to 'closed' thinking and a focus on immediate priorities for policy. Supporting strategic thinking explicitly - including work on long term visions for sustainability - can help to identify opportunities to connect science and policy agendas, lead to a better understanding of what science might be able to offer within a particular timeframe, and reduce the risks of neglecting emerging issues. Horizon scanning and scenario-planning tools may help in thinking strategically about long term futures, and inform longer term policy agendas.

The way forward: from interfaces to alliances

The move towards an alliance between science and policy requires a shift in how we do science and policy, creativity and resources. To move beyond silos and myths will require more incentives for individuals to improve the way in which science and policy operate and interact, increased transparency, real and high quality inter- and trans-disciplinary research, and strategic long-term visions. All this will be dependent on significant changes in training, supporting and incentivising those scientists and policy actors enthusiastic about crossing boundaries and carrying out activities at the science-policy-society interface. A genuine move away from silo approaches is needed to begin building alliances between science, policy and ultimately society. Only then will we see the increase in the quality of both science and decision-making needed to address the societal and environmental challenges of the 21st Century.

Looking for more information on science-policy interfaces?

For all SPIRAL results, see SPIRAL briefs at <http://www.spiral-project.eu/content/documents>. This brief is a result of research and interactions within and around the SPIRAL project. This brief was written by Juliette Young and Allan Watt (NERC CEH), Sybille van den Hove, Estelle Balian and Rob Tinch (Median), Kerry Waylen (JHI), Simo Sarrki (University of Oulu) and Jari Niemela (university of Helsinki) with input from all spirallers.

The **SPIRAL** project studies Science-Policy Interfaces between biodiversity research and policy to improve the conservation and sustainable use of biodiversity. SPIRAL is an interdisciplinary research project funded under the European Community's Seventh Framework Programme (FP7/2007-2013), contract number: 244035.

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⁴ www.ipbes.net/