



Towards strengthening environment science- policy interfaces at EU level: the SEPI exploration

The Brief in brief

This brief describes a process whereby the European Commission Directorate General for Environment (DG ENV) sought to better understand the issues underlying interactions between scientists and environment policy-makers. A complementary SPIRAL test case considers the process of strengthening the science-policy interface in relation to EU biodiversity policy.¹

Setting the scene

SEPI (Science for EU Environment Policy Interface) was launched in 2010, reflecting the wish of the Environment Commissioner to improve the acquisition of science to be used as evidence for policy. Currently, DG ENV acquires scientific evidence to support policy from a variety of sources. However, there is no systematic approach towards gathering evidence for cross-cutting and emerging issues. Under the SEPI process, DG ENV explored options for a stronger framework at the intersection between science and EU environment policy.

The SEPI process featured a series of events:

- An inaugural workshop on "*Strengthening the knowledge base for environmental policy making and implementation*" (Brussels, December 2010), to gather experts' views about good practices and practical innovations, building towards strengthening the interface between scientists and policy-makers.

- A study contract with two consultancies, to review existing practices within and outside DG ENV.²
- A workshop on "Assessing and Strengthening the Interface between Science and EU Environment Policy" (Brussels, September 2011), bringing together practitioners from both science and policy to identify practical and innovative additional approaches.
- Two sessions on "Science in support of evidence-based environmental policy making", focusing on inland, marine and coastal water issues, organised jointly by DG ENV and DG RTD during the 2012 EU Green Week event.

Despite SEPI being a demand-led, exploratory process, formal changes in working practices – in terms of designing and implementing new interface processes for DG ENV – have not so far been specified.

Approach taken in SPIRAL to study the test case

SPIRAL team members contributed to the SEPI process as informal advisors and participated in the various events. This case was about exploring issues and options rather than actually setting up a SPI. As a consequence, of the six dimensions used by SPIRAL to analyse SPIs (Objectives & Functions; Context; Structure; Processes; Outputs; and Effects) the first two were the most discussed, with some attention to potential structures and processes. At the meta-level, the SEPI process can also be seen as an example of a SPI where experts/scientists connected with policy makers to inform and influence the processes by which DG ENV gathers and uses evidence.

The SPIRAL approach has been to reflect on the justifications for strengthening SPIs, and on the constraints, notably those stemming from (or inherent in) the institutional context. We also looked at the objectives and functional changes under discussion.

Justification for the SEPI approach

For DG ENV, the justification for the SEPI approach lies in the recognition that³:

¹ See companion brief 'A Biodiversity Science-Policy Interface Mechanism for Europe?'

² EC 2012. Assessing and Strengthening the Science and EU Environment Policy Interface. DG ENV Technical Report 2012-059.

- Environmental issues are often: driven by science; holistic; characterised by complexities and uncertainties; and potentially long-term with irreversible consequences;
- Environment policy is largely driven by, and dependent on, science (for issue identification and assessment, notably at the EU level; development of solutions and monitoring strategies; generating public and political acceptance; and legitimising policy direction);
- Environmental policies pose particular challenges as they often deal with highly complex and interlinked issues;
- An evolution of the knowledge management model in DG ENV could be beneficial, i.e. a "more strategic, forward looking and integrated approach";
- Science-policy interactions are sometimes hindered by: (i) uneven approaches to risk and uncertainty; (ii) lack of incentives for policy research compared to basic and industrial research; (iii) difficulty presenting the case for funding policy research; (iv) inertia / lack of foresight in research planning; (v) policy demand for quick "certainties"/definitive truths, generated by political demand for the same; and (vi) lack of effective dissemination, exploitation and interpretation of policy-relevant research results; (vii) the myriad of sources of research/science, making it quasi-impossible for policy-makers to know whether they are accessing the 'best' or latest information; (viii) the weight of history: science and (government) policy sectors have tended to be wary of each other.
- Provision of access to information "on the ground", including information coming from Member States, and access to a broad variety of relevant knowledge holders (including citizens' science);
- Systematic methods for identification of uncertainties and gaps in knowledge;
- Provision of high quality science in cases of litigation over complex issues;
- Timely access to credible knowledge in controversial areas and science to support the precautionary principle;
- Allowing DG ENV to keep track of new technologies for policy implementation, reporting and monitoring;
- Alerting policy makers about emerging issues, including early warnings on potential environmental, social and economic impacts;
- Structured foresight activities embedded in the strategic environment policy planning process;
- Contribution to the establishment of a long term vision based on best available scientific evidence and consensus.

Key lessons learned from the Test Case

One striking aspect in this case is the challenge posed by the EU institutional context and by the broad remit of a potential SPI for EU environment policy, including in particular:

- The need for integration of environment policy across other policy areas, both inside DG ENV and across different EU policy areas, in a context where the 'silo mentality' remains inherent in the EC structure;
- The need for integration and comparability at various scales, from local to member state to regional to EU level;
- The fact that environment policies build on an evolving mosaic of SPIs and the need to build on those that work and fill gaps in a flexible manner with the active consent of those involved.

Together, these three challenges present significant difficulties, but their definition already helps in identify action to address them.

Other notable hindering factors include:

- The persistent dominance of the linear model (one-way transfer of knowledge from science to policy) which hinders the development of more dynamic and dialogic SPIs. This may lead to a lack of credibility for the very process that ought to improve the evidence base for environment policy: key players need to understand and feel comfortable with the concept of developing an

Objectives and functions

A series of needs was identified from the policy-making viewpoint: supporting (mandatory) policy impact assessments; providing evidence for the acceptance and legitimacy of policies; providing grounds to counter policy 'disruption' by vested interests and/or lobbyists; need for lawyer-proof scientific evidence in support of legal cases; and an awareness of policy-makers' operating domain and the political environment.

The following specific objectives and potential functions⁴ were explored during the SEPI process, building on those needs:

- Better matching knowledge provision with (timing of) policy cycles;
- 'Translation' of research output into 'policy-speak';
- A new, durable framework for on-going, policy-led dialogue between scientists, policy-makers and other stakeholders;

³ See in particular EC 2012, op. cit.

⁴ 2010 workshop summary, op.cit.

interactive interfacing model for science-policy interactions. One possible solution here is to set up a pilot iterative process, trying out more dynamic SPIs in one or two areas of policy, demonstrating the substantive value added and cost-efficiency available from better practices.

- The lack of a clear high-level mandate to effectively set-up the sort of SPIs considered during the SEPI process. This seems counter-productive and leads to a lack of legitimacy which hinders policy progress.

The SEPI process provided worthwhile reflections and understanding of the stakes, and many positive suggestions for progress. But it did not (as yet) lead to much practical action. The explanations may lie partly in the fact that the vision for EU environment policy that existed in 2010 and the appetite for radical paradigm changes in the conception and management of science-policy interactions both seemed rather weak. This situation should change in the future with the 7th Environment Action Programme.⁵ The broader current context of budgetary cuts and constraints on the European Commission (5% staff cuts looming) triggered by the economic crisis will also have had an effect, in particular for DG ENV, facing ever stronger scepticism and struggling to keep environment issues on the political agenda. In such a climate, many may consider that 'details' such as renewed SPIs cannot be a priority.

Looking for more information on science-policy interfaces?

For more SPIRAL results, including separate briefs focussing on results from other test cases, see companion 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 Sybille van den Hove, Rob Tinch and Estelle Balian (Median), and Allan Watt (CEH),

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⁵ COM(2012) 710 final, available at:

http://ec.europa.eu/environment/newprg/pdf/7EAP_Proposal/en.pdf