Science-policy interfaces processes: fitting activities to evolving contexts

The Brief in brief

This brief examines the processes used by science-policy interfaces (SPIs) in their design and operation. It considers the aims and attributes of key processes, and their impact on the credibility, relevance and legitimacy of the SPs. This brief is aimed at those developing SPIs, as well as actors evaluating or funding SPIs.

What are SPI processes?

A distinction can be made between structures, objectives & functions, processes, outputs, and outcomes of SPIs (see companion SPIRAL briefs[1]).

SPI processes refer to the ways in which the SPI uses its structures to achieve its objectives and functions, via production of outputs.

Just as there are many 'types' of SPI, there are a great many kinds of process. Processes will often be defined by procedural rules and guidelines, but there may be additions to, or variations from, 'official' codified procedures, and in some cases most interaction may be *ad hoc.* In this brief we first consider what processes try to achieve, and then outline some aspects of key processes that need to be considered.

Aims of SPI processes

Processes are in place to ensure, in particular:

- wide and fair participation;
- transparency;
- effective communication among participants;

- provision of resources and inputs;
- co-production of knowledge;
- timely and effective communication with target audiences;
- capacities inside and outside the SPI;
- evaluation of the SPI.

Aspects of SPI processes

The processes of an SPI define the ways in which its key functions are actually carried out. The following table describes the major aspects of the key processes that SPIs typically need to undertake. There are important trade-offs between these processes and SPIs need to decide how to allocate scarce resources across different ones.

Key Processes	Components
Horizon scanning	Procedures to anticipate science and policy developments.
Continuity	Continuity of SPI work on the same issues; continuity of personnel; iterative processes.
Adaptability	Responsiveness to changing contexts; flexibility to change.
Conflict management	Strategies such as third party facilitation; allowing sufficient time for compromise.
Trust building	Possibilities to participate in discussions, clear procedures, opportunities for informal discussions; transparency about processes and products.
Capacity building	Helping policy makers to understand science and scientists to understand policy makers; building capacities for further SPI work.

These processes are discussed in some more detail after the next section on credibility, relevance and legitimacy.

Processes and CRELE

Three important attributes may help to explain SPIs' influence, outcomes and impacts: the perceived credibility, relevance and legitimacy (CRELE) of the knowledge and

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[1] www.spiral-project.eu/sites/default/files/04_Building%20for%20success.pdf
www.spiral-project.eu/sites/default/files/22_SPI-outputs.pdf
www.spiral-project.eu/sites/default/files/06_%20GoalsandRoles.pdf
www.spiral-project.eu/sites/default/files/21_Focus-on-Impact.pdf

processes involved (for more information, see the "Keeping it CRELE" SPIRAL Brief[2]).

Different processes have different implications for CRELE, depending on various contextual features, and there can be trade-offs to consider in deciding which aspects to emphasise[3].

For example, legitimacy may be enhanced by various processes for ensuring wide participation, trust-building and conflict management; but these processes take time and can limit the scope for rapid action and therefore relevance.

This can be partly countered by horizon scanning, enhancing continuity and adaptability. In fact, many processes have strongly dynamic features: these are the on-going ways in which SPIs use structures to achieve functions, so they are inherently iterative. Participation in them can lead to learning and improvement, especially if evaluation and change are made part of the processes.

> *You know, you are trying to establish dialogue in a very short period of time. You do not even have a common concept, it makes the dialogue really complicated. … I guess you can say that's something we learned during the process, we got better.*
>
> *Dr L., scientist*

Horizon scanning

To stay relevant, and also credible, SPIs need to implement processes to scout out the future policy and decision contexts, and science needs and trends. Horizon scanning includes various planning, scoping and knowledge-filtering activities.

Continuity

Continuity of policy support, communication, network building and maintenance, as well as a certain amount of continuity in membership and participation, are necessary to ensure smooth running of the SPI and to avoid erosion of CRELE.

Adaptability

On-going assessment and evaluation must be combined with agreed processes to revisit and modify structures and procedures, respond to changing contexts, meet new challenges and take advantage of new opportunities.

Conflict management

Clearly stated and agreed methods for managing disagreements, including, for example, specific stages for

recourse to internal and independent external conciliation, will help to avoid the potentially corrosive effects of conflict.

Trust building

Effective communication is grounded in trust, with both rational and emotional aspects being important. Regular opportunities for open communication, transparency and sensitivity to diverse cultures and values will help. Following agreed procedures for internal and external communication will help ensure participants do not feel things are happening "behind their backs".

Capacity building

The effectiveness of the SPI, and of the messages it seeks to transmit, will often be enhanced by on-going processes to building capacity inside and outside the SPI, thereby ensuring that scientists, policy makers and others have the knowledge and tools to understand each others' positions and constraints, as well as the technical details of policy contexts and science.

Final thoughts

The most appropriate and relevant processes needed in SPIs vary according to a number of dimensions of the policy problem, governance context, and scientific evidence. So it is neither possible nor desirable to derive 'one size fits all' solutions to the problems of designing, evaluating and improving SPIs for influencing behaviour. However, the processes identified here can help those working with SPIs to improve them. Processes, often the most dynamic and flexible components of SPIs, deserve particular attention in fitting SPI activities to evolving contexts.

Looking for more information on science-policy interfaces?

For more SPIRAL results, including separate briefs focussing on lessons learned from other SPI processes, 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 Simo Sarkki (University of Oulu), Jari Niemelä (University of Helsinki), and Rob Tinch (Median).

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[2] http://www.spiral-project.eu/sites/default/files/07_Keep-it-CRELE.pdf
[3] http://www.spiral-project.eu/sites/default/files/13_Brief_CRELE-choices.pdf