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Influence of Foresight on Public Policy in Flanders

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Purpose

This brief presents the findings of a research project aimed at understanding the influence of policy-oriented foresight on public policy in Flanders. A foresight identifying six strategic clusters for technology and innovation policy in Flanders is analysed. The results of this analysis show that the foresight-oriented technology assessment (FTA) did have a significant impact on the policy process, but the greater effect might prove to be in its role as a reference point for future FTAs, which will then give shape to long-term technology and innovation policy in Flanders.

Assessing the Impact of Foresight

Policy-oriented foresight or foresight in a public policy context is aimed at supporting the decision-making process. By anticipating as much as possible different, alternative developments, it seeks to contribute to effective long-term decision-making. The policy process itself, however, is non-linear and often depends on temporary "policy windows" (Kingdon, 1995), which leave the specific role of exercises aimed at strengthening the evidence base of public action a little unclear. This is also the case for policy-oriented foresight.

The literature on foresight contains many studies that identify factors for success. However, little empirical evidence is available that policy actors actually use the outputs of foresight exercises aimed at supporting policy decisions.

Based on the factors for success found in the foresight literature, our research project analysed three case studies. The first case examined was a foresight identifying six strategic clusters for technology and innovation policy in Flanders. This brief assesses whether and how the foresight influenced the Flemish government's policy decisions. The analysis of influence was informed by the evaluation literature since studies on foresight rarely address this question.

The first section of this brief provides insight into different aspects of the foresight research in this particular case. The assessment of the influence of the foresight in the second section is followed by a first set of recommendations on how to improve the relationship between policy-oriented foresight and public policy.

Foresight in Flanders

The Flemish Council for Science and Innovation (VRWI) conducted a foresight on innovation and technology in Flanders from 2005 to 2006. The VRWI is a strategic advisory council in the policy domain of science and innovation. It advises the Flemish government on its science and technology policies either in a proactive manner or at the government's request. The council is a multi-actor arena where different stakeholders in the field of science and innovation meet. These stakeholders mostly have an industrial background, but they also include scientists from universities or representatives from other knowledge institutions in Flanders as well as government representatives from the administrative or political level. The VRWI operates as a 'boundary organization' (Guston, 2001) between

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science, politics and society; this will prove important for the influence of the foresight exercise that the organisation conducted on public policy in Flanders.

Approach towards Technology & Innovation

The foresight was set up in 2005 at the VRWI's own initiative. It aimed at "providing a long-term reference point for technology and innovation in Flanders" (Smits et al. 2006:10). The starting point for the study can be traced back as far as 1997 when the VRWI and other key stakeholders in the technology and innovation field felt the need to gain more insight into the scientific, economic and societal developments that might possibly influence the welfare and well-being of the citizenry in Flanders. Together with a group of university researchers, a process was organised to develop an appropriate methodology that would serve to assess this problem. Methodological inspiration was found in foresights from Japan and Germany as well as those conducted at the European level.

Initially, the foresight had been designed as a rather broad exercise, addressing different societal, economic and scientific problems. However, this broad focus was not retained. The VRWI had initiated the foresight proactively, but upon further consultation with stakeholders, among them political actors, the scope of the study was narrowed down to focus on technology and innovation. Central to the analysis were those developments in the science, technology and innovation field necessary for Flanders to remain competitive both within the European area and the globalised world.

Once the focus on technology and innovation had been established, the different steps to conduct the foresight were put in practice. The VRWI took the lead while cooperating closely with the scientific research group that had developed the methodological approach.

Methodology

The foresight was conducted in three consecutive steps, leading to the formulation of specific policy priorities for six sectors (or clusters) of technology and innovation in Flanders. The third step was the actual foresight. There, the future was assessed with a medium-term horizon of about ten years, i.e. 2015. As will be elaborated below, the study was highly participative and intensive.

In a first phase, a SWOT analysis (strengths, weaknesses, opportunities and threats) was conducted on the different sectors in the technology and innovation field in Flanders.

The second phase of the study consisted of linking the results of the SWOT analysis with those of a broader European foresight. Based on this synthesis, a high-level group of experts (the 'captains of industry' in Flanders) identified six strategic clusters for technology and innovation in Flanders. These cover a broad range of technological and innovative domains and are clustered on a thematic base. The six strategic clusters that were identified by the high-level group in this second phase are

1) Transport, logistics and services supply chain management
2) ICT and services in health care
3) Health care prevention and treatment; food and agriculture
4) New materials, especially nanotechnology, and the manufacturing industry
5) ICT for socio-economic innovation
6) Energy and environment for the services and manufacturing industry

The first two phases took about a year to be completed. The selective expert consultation at the end of phase two set the stage for a broader consultation of experts via the Delphi method in the third phase. This final phase was framed in terms of the six strategic clusters identified. The actors consulted were all R&D experts in the field of technology and innovation in Flanders. In total, 130 R&D experts participated in the third phase of the study, which took six months to be completed. The experts were divided along the six strategic clusters identified and, using the Delphi method, were asked to assess 160 possible future developments as well as the current and future capacities in the field in Flanders.

Via two or more rounds of discussion, a consensus was reached between the experts in each of the strategic clusters. They identified 30 specific priorities in technology and innovation. Additionally, 85 of the 130 experts agreed to evaluate factors critical for the achievement of these priorities. The VRWI Council then validated these results and formulated specific recommendations for the different stakeholders: universities, industry and government. These recommendations were of particular importance to the latter. A more detailed account on the role of government within a broader technology and innovation context and the use of the results of the study is provided in the next section.

Diffusion of Results among a Wide Range of Actors

The foresight was captured in two reports. Firstly, a summary report introduces the 30 priorities, the factors for success and the set of recommendations. Secondly, a more technical report elaborates upon the foresight process itself. It provides a detailed account of the three phases that constitute the foresight.

Additionally, the Council and its president took specific action to promote the results of the study among a broad range of actors. They did this by presentations and road shows to diffuse the results. An important step

in this respect was to engage the support of universities and industry not only before and during the foresight process but also after the foresight was completed. This assured diffusion of the results among a first and important set of stakeholders. A third important stakeholder, government, was much less intensely involved in the foresight. Diffusion of the results of the study among political and administrative actors is, however, an important factor for the foresight to have an impact on technology and innovation in Flanders. The next section assesses to what extent this was accomplished.

Influence on Public Policy in Flanders

Did the foresight influence the Flemish government's strategic decision-making on technology and innovation? To answer this question, we must first consider the concept of influence itself. Moreover, we must describe the broader technology and innovation policy context in Flanders before we can adequately address the question of influence on policy there. These are the issues we will now turn to.

A Framework for Assessing Policy Influence

From the perspective of policy actors, influence of evidence on policy can be viewed as knowledge utilisation. There are three dimensions for the analysis of influence on policy: source, intention and moment. This brief focuses in particular on the first dimension of influence: the source of influence.

The source of influence of foresight on policy can be product-related or process-related. Product-related influence is the influence of the output of foresight, i.e. the results of the study presented in a report. The results of foresight can influence policy in different ways. We differentiate between four types of product-related influence:

1) Direct instrumental influence is reflected in official policy documents.
2) Conceptual influence is seen as "enlightenment" (Weiss, 1980) of policy makers.
3) Agenda-setting influence means that new topics can be discerned, which were previously not under the attention of policy makers.
4) Political-strategic influence takes place when political actors legitimise or oppose government actions based on the study's results.

The foresight can also have a significant process-related influence on policy and policy actors. The involvement of political or administrative actors at an early stage of the process might promote a more future-oriented view on policy or a better understanding of the possible added value of foresight for policy. Indirectly, this process-related influence might enhance the product-related use of foresight since it makes policy actors more receptive to its outcomes.

Importance of the Specific Policy Context

From a historical perspective, technology and innovation policy in Flanders can be characterised as predominantly technology-pushed or supply-driven. Policy 'demand' was and is to a large extent adapted to industrial and scientific 'supply'. In other words, technology and innovation policy in Flanders is usually developed bottom up. Public funding is mostly responsive to the R&D policy of industrial actors and of universities. It is to a much lesser extent coordinated (let alone steered) by government within a broader strategic framework. The foresight tried to provide such a strategic framework by identifying future technology and innovation priorities. Via its recommendations, it also assigned a specific role to the Flemish government for the framework to be implemented. In principle, the Flemish government could assume different roles, ranging from a hands-off and encouraging position (bottom-up policy approach) to a hands-on and actively steering role (top down). The latter is in order when the task at hand requires making strategic policy choices and taking the necessary actions to enable them.

Assuming that the foresight served as necessary input for establishing a strategic framework on technology and innovation in Flanders, the involvement of a broad range of stakeholders was not only a logical consequence in a supply-driven policy domain. More importantly, it secured the necessary stakeholder support for implementing the priorities–which is especially critical when the strategic priorities are defined by a hands-on, steering government.

Policy Influence Analysed in Documents

The influence of the foresight on public policy was analysed through a thorough document analysis and interviews. The document analysis included strategic policy documents, policy briefs, white papers, parliamentary documents etc. The interviews were carried out with political and administrative stakeholders as well as members of the VRWI responsible for the study.

Challenge-driven Innovation Approach Inspired by Foresight Exercise

At first, the report had no influence on public policy. The foresight report was published in 2007, at the end of the then Flemish government's legislative period when policy directions had already been decided upon. The policies in place were further enacted toward the end of the

legislature. Later on, however, the results of the foresight eventually significantly influenced public policy in Flanders in several ways.

First, there is reference to its results in official strategic policy documents, such as the broader strategic framework project "Flanders in Action" set up by the Flemish government to make Flanders a frontrunner region in the social as well as in the economic domain. This emphasis on the strategic level was translated into the Flemish government's policy note 2009-2014 on innovation policy and the related policy briefs and actions. More recently, in May 2011, the Flemish government approved a conceptual brief giving shape to a more hands-on strategic approach in technology and innovation in Flanders. The focus on a 'challenge-driven innovation' approach is particularly inspired by the strategic orientation provided in the foresight. Moreover, the establishment of innovation nodes can be traced back, among others, to the strategic clusters defined by the foresight in 2007. It therefore seems fair to say that the foresight has had an important direct instrumental influence on public policy in Flanders.

The study is also well known among a broad range of actors in the policy domain. Especially the first two phases of the study (SWOT and relative positioning of Flanders in Europe) have served as a knowledge base for political and administrative actors in government, marking an important conceptual influence of the foresight.

When we consider the study's influence on the political agenda, political attention seems to have been mostly directed toward the perceived need to make strategic choices for the domain. This need was addressed in the foresight and played a key role in conducting the exercise. Contrary to a predominantly hands-off approach in the past, the government now has come to consider, accept and implement a more demand-driven approach when deciding on innovation policy at the strategic level.

Thus, we can discern an important, directly instrumental and conceptual influence on policy in terms of agenda-setting. This is a medium-term influence, i.e. the effects are observed three to five years after the study was published. By contrast, there does not seem to have been any politically strategic influence.

Process-related Trade-off for Technology & Innovation Actors

Additionally, the foresight has also had an important process-related influence. It is considered an important first exercise of its kind in the policy domain since it was aimed, quite explicitly, at bringing about a strategic, long-term vision and making policy choices in technology and innovation in Flanders. It has introduced a certain dynamic among the actors in the policy domain itself. Several actors indicate, for example, that a follow-up foresight is necessary to develop an adequate long-term strategic policy in the domain of technology and innovation since this foresight dates from 2006 with a horizon of 2015.

Sources and References

Project link and research themes of the Policy Research Centre – Governmental Organization in Flanders

- http://soc.kuleuven.be/sbov/eng/research/epr14.htm
- http://soc.kuleuven.be/sbov/eng/index.htm

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