

Making FP6 work

Stimulating Dutch participation: profit and policy

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Advisory Council for Science and Technology Policy

Main Points of the Advisory Report

Focus and questions addressed

This advisory report discusses the policy that the government needs to pursue to allow the Netherlands to participate successfully in the European Union's 6th Framework Programme. The request for an advisory report from the Ministers of Economic Affairs and Education, Culture and Science focused on the consequences of the new instruments in FP6: the *Networks of Excellence* and the *Integrated Projects*. The AWT believes that this question has to be answered in the context of a broader vision on the importance of Dutch participation in FP6. A strategic framework is needed for reaching a decision, since what is at stake is not just taking full advantage of FP6 but also Dutch policy with respect to internationalisation of research and research policy in the longer term. In this advisory report the AWT therefore addresses three questions:

opportunities & threats of FP6

a. What are important elements in a strategic philosophy for government policy in the Netherlands towards internationalisation of research and research policy? In this light, what are the opportunities and threats of effective participation in FP6?

strengths & weaknesses of the research system

b. How are Dutch companies and research institutes 'positioned' for participation in FP6? What are the strengths and weaknesses of the Dutch research system in the event of participation in FP6 with its new instruments?

what should the government do?

c. What measures and actions should the government take to ensure successful participation by the Netherlands in the new instruments of the 6th Framework Programme?

In section II.1 of the main report the Council discusses the remit of the advisory report and parameters in more detail, as well as the context i.e. the debate about the future structure of European research and the autonomous trend towards internationalisation in research.

Considerations: opportunities and threats of FP6

National interest of participation in FP6

The AWT feels that the importance of participation in FP6 should not be measured too much– and certainly not exclusively – in financial terms, for example whether or not it will generate a fair return. The more important question is what opportunities and threats lie hidden in a decision to participate or not participate in FP6 in the longer term. To identify those opportunities and threats a framework is needed for assessing the 'national interest' of participation in FP6.

This national interest can be described in general terms as 'contributing to welfare and prosperity'. The AWT observes that in the field of science and technology there are two diverging views and opinions about how this interest can best be served through participation in FP6.

knowledge as a product

Knowledge as capacity

'knowledge as capacity' must have priority

..... and dictate participation in FP6

- A first approach is to place the emphasis on the substantive, thematic match between FP6 programmes and projects and innovation processes in Dutch companies and institutions. The closer the fit, the better the Netherlands' interests will be served. In other words, it is a question of 'knowledge as a product', the actual results the programmes yield and which can be used as direct input for innovation processes and hence for the competitiveness of Dutch companies and institutions.
- A second approach is to stress the dynamics, the pace and partly the unpredictability of developments in the economy, society and knowledge development. These factors make flexibility and effectiveness, the ability to cope with uncertainties and the capacity to respond flexibly to developments increasingly important. This point of view is less concerned with 'knowledge as a product' than with the 'capacity' to fathom new developments in knowledge, to build on them and to produce innovations. From this perspective the importance of full participation in FP6 is to further develop that capacity and to 'be a player' and be regarded as such.

Although both approaches have their merits, in the Council's view the second approach ('knowledge as capacity') will gain in importance in the future. After all, companies and other social actors increasingly establish their contacts and place their contracts where there are good researchers or research groups, with proven excellence in developing knowledge and building on it. The 'national interest' is best served in these circumstances by giving priority to 'knowledge as capacity'.

'Knowledge as capacity' should, the AWT feels, dictate a national and international research and innovation strategy for the Netherlands and the formulation of science and innovation policy. Giving priority to 'knowledge as capacity' would also provide a framework for decisions on Dutch participation in FP6: it offers the Netherlands the opportunity to (further) develop that capacity. That is why it is important for Dutch parties to participate intensively in FP6. It is therefore not a question of the financial resources that can be acquired from FP6 but of regarding and using FP6 participation strategically to further support and strengthen what we already regard as important in the Netherlands.

In Section II.2 the Council discusses in more detail the strategic framework and the opportunities and threats of participation or otherwise in FP6 in from the perspective of the 'national interest'.

Practical details: strengths and weaknesses of the research system

After discussing opportunities and threats from a national perspective, the question is what are strengths and weaknesses with respect to participation by Dutch companies and research institutes in FP6. After all, it is the companies and research institutes themselves that will have to be attractive and strong enough to play an important role in the *Networks of Excellence* and the *Integrated Projects*. The Council has the following observations:

- One strength is that the point of departure for the Netherlands for the new themes and instruments of FP6 is relatively good. Measures and

Good point of departure

A number of bottlenecks

Self-management & self-regulation as a point of departure

new themes and instruments of FP6 is relatively good. Measures and initiatives have been taken in national policy in recent years that have ensured the Netherlands is 'well positioned' for FP6. This applies both in the purely scientific sense (good quality science, development of expertise on FP6 themes) and in the process sense (experience in forming consortia or alliances).

- The main weaknesses or bottlenecks identified by the Council concern:
 - the ability and willingness to make strategic choices, especially in universities;
 - the capacity of the research system to absorb people and resources;
 - the research management capacity needed for the consortia in FP6;
 - awareness of and experience with IPR arising from the *Networks of Excellence* and *Integrated Projects*.

In Section II.3 the Council outlines the strengths and weaknesses in more detail.

Role of the government: recommendations along three lines

Having reviewed opportunities and threats as well as strengths and weaknesses, the next step is to draw conclusions and set out the consequences for policy. Given the AWT's terms of reference, the Council focuses on the role of the government and on the measures to be taken by it (specifically by the Ministries of Economic Affairs and Education, Culture and Science). The Council realises that in this way it is only addressing part of the problem. The role of various other actors is at least as important, if not more important: individual researchers in companies and research institutes, those responsible for strategic management in those companies and research institutes, intermediary organisations such as the Netherlands Organisation for Scientific Research (NWO) and EU Liaison/Senter. These parties are, individually and jointly, themselves responsible for many of the actions that will have to be taken if the Netherlands is to play a full part in FP6 and to prepare properly for the further internationalisation of research. Self-management and self-regulation of this nature is a great virtue, but nevertheless there are tasks that should ideally be carried out by the government.

The Council has arrived at three main groups of recommendations designed to ensure effective participation in FP6 by Dutch research institutes in the shorter term, and to strengthen the international position of Dutch companies and research institutions in the longer term.

A. Creation of stimulating conditions and facilitation

The AWT feels the government's most important role is to create the conditions to stimulate and facilitate the proper functioning of the Dutch public and private research infrastructure in a context of internationalisation. The ultimate aim is to allow the actors in the field to perform their own roles optimally and to seize opportunities in terms of 'knowledge as capacity'. This is not only important for participation in

<p>continue 'investing'</p>	<p>'knowledge as capacity'. This is not only important for participation in FP6 in the shorter term but also for the international position of the Dutch research system. More specifically, the Council's recommendation is:</p> <ul style="list-style-type: none"> • <i>'Invest' structurally and at an adequate level in the research institutes; at the same time ensure a good balance between (a) excellence and focal points, (b) a broad basis and (c) scope for innovation.</i> <p>Given the progressive internationalisation of research and research policy, it is necessary to concentrate more than in the past on excellence and creation of core areas of expertise. In addition, further investment is needed to maintain a broad base of quality research. Thirdly, there has to be a certain freedom for innovation in order to continue reaping the benefits in the future. The point is to maintain the right balance between these three elements.</p>
<p>better networks in Brussels</p>	<ul style="list-style-type: none"> • <i>Invest more time and attention at senior level in the government's networking function by strengthening and improving the formal and informal representation in Brussels.</i> <p>The Council observes that there is still room for improvement in the area of active networking in the EU and international circuits. The Council feels that the Dutch representation in official bodies should be strengthened, and that more time and effort should be devoted to informal networks; since these are where the terms of reference and the modes of implementation are usually decided and the wheeling and dealing takes place.</p>
<p>in the Netherlands, connect separate policy circuits</p>	<ul style="list-style-type: none"> • <i>Improve the coordination and interaction between the national and international policy circuits in the Netherlands.</i> <p>The recommended networking in the EU can only work properly on the basis of close interaction with Dutch policy. The AWT observes that this is inadequate at the moment: in the ministries the circuits concerned with national and European research and innovation policy often operate quite separately. A greater integration of national and international policy circuits is necessary, especially in the Netherlands itself.</p>
<p>information aimed at brokering</p> <p>Substantive</p>	<p>B. Active facilitation and stimulation of participation in FP6</p> <p>A second group of recommendations is concerned specifically with participation in FP6. The government (Ministries of Economic Affairs and Education, Culture and Science) should actively facilitate and stimulate this participation from the perspective of 'knowledge as capacity'.</p> <ul style="list-style-type: none"> • <i>Pro-active high calibre publicity about FP6, aimed at 'brokering' between relevant parties.</i> <p>Given the new instruments in FP6, besides general information (developments and possibilities in the Framework Programme) a more proactive role than in the past is needed in providing information aimed at forging partnerships ('brokering').</p> <ul style="list-style-type: none"> • <i>Provide a clear impression of what is actually happening in partnerships in the research field relevant for the Framework Programme.</i> <p>In addition to the need for a more proactive approach, there should also be a clearer impression than at present of what is actually happening in the research field: substantive monitoring. This is needed in order to be able to 'broker' between parties interested in forming (international)</p>

monitoring for supervision

able to 'broker' between parties interested in forming (international) consortia, but also to give the government a good impression of Dutch participation in qualitative and quantitative terms in the consortia that are created.

- *Produce a good helpdesk for the necessary support for participation in FP6.*

Helpdesk

Thirdly, a national helpdesk should be established to provide support in the actual formation of consortia in FP6, especially to properly regulate contractual matters.

- *Assign the three tasks of brokering, substantive monitoring and helpdesk to EU Liaison. This will require a repositioning of EU Liaison, with different and additional tasks.*

Repositioning of EU Liaison

Although the AWT's main concern is that the government ensures the three tasks are carried out, it would prefer to see these tasks assigned mainly to EU Liaison. EU Liaison should also involve other parties, especially NWO and VNO/NCW. EU Liaison in its existing form will not be able to carry out these tasks. EU Liaison will have to be repositioned and it will have to be assigned different and additional tasks.

C. Vision on more far-reaching internationalisation of research policy

The third group of recommendations comprises establishing a timetable for longer-term strategic issues surrounding research policy in the context of internationalisation. The specific recommendation is:

- *Initiate strategic discussions about further internationalisation of research policy. Incorporate them in current processes and practices (mainstreaming of the internationalisation policy), but provide some direction. Carry out these strategic discussions expressly with a view to the Netherlands' presidency of the EU in 2004.*

Initiate strategic discussions

These discussions will preferably lead to a joint vision and shared positions that can be put forward elsewhere in order to promote Dutch interests as forcefully as possible. The point is to make these discussions part of current processes and practices. The AWT distinguishes three types of issue that require further strategic discussion:

- Policy issues that touch on openness or otherwise of the Dutch research and innovation systems.
- A Dutch vision on the structure of the future European research system and the place of Framework Programmes in it.
- The preferred content of future Framework Programmes from a Dutch perspective.

The Council looks at these three lines of recommendations in Section II.4 of the main advisory report.