

Summary

Dutch Compass for the European Research Area **Strategic framework for the internationalisation of research and innovation policy**

Request for advice

The Ministers of Economic Affairs (EZ) and Education, Culture and Science (OCW) have requested the Advisory Council on Science and Technology Policy (AWT) to advise them concerning the internationalisation of research and innovation policy: how should the national activities in this area be effectively embedded in an international context? The need to do so is, on the one hand, due to a strong autonomous trend towards the internationalisation of research and innovation and, on the other hand, to the intensification and proliferation of research and innovation policy in the European Union, linked to the desire to make Europe the most competitive knowledge-based economy in the world. This report focuses on three questions:

- What, in terms of government policy in the Netherlands, are the important points of departure regarding the internationalisation of research and innovation policy?
- What course should national research and innovation policy take to enable the Netherlands to adopt a strong position in a European area of research and innovation?
- What Dutch input and efforts are desirable as regards European policy proposals and new policy instruments?

This report centres on vision, strategic considerations and assessment frameworks; this is not the place to make detailed recommendations about specific subjects in this field. The AWT's intention with this report is to stimulate discussion in the Netherlands for the longer term, about strategic issues concerning the internationalisation of research policy.

Context: major developments in Europe

With a view to supporting the Lisbon objectives, Europe has embraced the concept of the ERA: the European Research and innovation Area. The aim of the ERA is to tackle three problems in the European research landscape: the fragmentation of research activities; the lack of stimulation for research and innovation, and inadequate research funding in Europe. The context for European research and innovation policy is also characterised by a number of current, far-reaching developments and a high degree of complexity. The EU will soon expand to 25 member states and that will require a new treaty to be signed. In addition, the European research area is made up of a very wide diversity of parties, who often have a significant amount of autonomy. Furthermore, these parties have different views about Europe and about the aims and implementation of a European research area. This makes it a real challenge to try to achieve more synergy in European research.

Points of departure regarding internationalisation: a Dutch perspective

AWT believes that the discussion about strategy should start by clearly setting out the points of departure for the Dutch position with regard to the internationalisation of research and innovation. The Council considers seven points of departure to be important in this respect:

1. Participate wholeheartedly in the development of the European research area.
2. Think and operate, however, from a global perspective.
3. Facilitate the autonomous tendency towards internationalisation of research.
4. Make clear strategic choices for the Netherlands in the meantime.
5. Deploy 'knowledge as an asset'.
6. Embed the knowledge-based economy in a knowledge-based society.
7. Emphasise the importance of knowledge utilisation.

The first four points of departure relate to the tension between, on the one hand, 'Europe standing strongly together' and, on the other hand, 'the Netherlands adopting a strong position'. The last three points of departure are related to a vision of knowledge and the knowledge-based society.

Chart your own course; recommendations for Dutch policy

Given these points of departure, the question is in what, and to what extent, Dutch research and innovation policy should follow European research and innovation policy. The AWT has answered this question by making distinctions in a multitrack approach for different types of research activities. The crux is the extent to which research and research policy should follow from – or be connected to – Dutch, national knowledge needs. If this is the case, the Netherlands will need to make its own clear strategic choices on those points – much more than currently happens – by ensuring that knowledge development and knowledge utilisation is well regulated in the Netherlands itself. In its multitrack approach, the AWT differentiates four categories of research – each with a suitably differentiated policy approach.

- *Curiosity-driven research* is best organised at international level, in open competition. This type of research therefore has to be in line with the activities in the European field. For the Dutch government – in this case OCW – this entails that it has to create the conditions in which groups in the Dutch knowledge infrastructure are able to participate optimally in the international competition. Steering is by means of preconditions and not on questions concerning content.
- *Research that is important for innovation in companies* is typically something that is kept 'close to home', ie, in the Netherlands, and which must be promoted. Dutch knowledge infrastructure must be able to offer knowledge-intensive companies – the crucible of innovative energy – excellence. For government policy this means that research will then focus more on strengths of our business community than is currently the case. It is up to EZ and OCW, in collaboration with companies, to choose the necessary key points.
- *Research that is important for social issues having a specifically Dutch element*, such as water management or the intensive use of space, must also be well organised in the Netherlands itself. Ultimately, this is a critical factor when tackling social problems and for the quality of public services. The government –

in this case, the specialist departments with OCW in the role of coordinator – has the specific task of maintaining the knowledge base, and should therefore make its own Dutch choices with regard to the organisation of key points. In addition, the government could put more into innovative calls for tenders, and should act much more strategically as the ‘launching customer’ for such knowledge areas.

- As regards *research on issues at a European or global level*, such as sustainable development or climate change, there is no need for the Netherlands to make its own strategic choices. Coordination of research at a European level actually offers many advantages, both in terms of quality (more competition) and bundling of resources (less fragmentation). Here, the government’s main task is to maintain the knowledge infrastructure and to create good conditions, so that our research groups can hold their own against the international competition. In addition, government (in this case, the specialist departments) can use international consultations to ‘land’ research themes for the Netherlands and strong Dutch research groups.

In short, the Council believes that the Netherlands – *more* than is currently the case – has its own strategic choices to make, based on the demand for knowledge and the strengths in the Netherlands. With this in mind, the Council advocates increasing its efforts with regard to policy on key points in research. This needs to be achieved through an optimal balance between the necessary broad basis in research and the space for renewal.

Besides having a clear course for national research and innovation policy to follow, the Council considers that increased efforts are necessary to enable the Netherlands to operate intelligently and tactically within the European arena. The AWT advocates:

- Better and more effective networking in the EU
- Better coordination and links between the national and the European policy circuit
- Systematic monitoring of cooperation in the research field *and* of the policy in other member states
- Strengthening the helpdesk to support Dutch parties
- Better use of knowledge developed in EU programmes

Recommendations for Dutch efforts in European policy

The Netherlands not only has to chart its own course in the European research landscape, but also has to take advantage of policy proposals and instruments coming its way from Brussels. The range of mechanisms for coordinating research, and the range of European policy instruments, is very large. This report therefore restricts itself to the main points on coordination mechanisms and to policy instruments that are currently receiving a great deal of attention.

In a rapidly changing environment like the European environment, it is important to continually reassess which mechanisms or policy measures the Netherlands should or should not use. The AWT advocates a pragmatic and flexible attitude from our government in this regard, and supplies a permanent assessment framework in order

to promote consistency and coherence of policy. The assessment framework can be used – with a view to issues that we in the Netherlands consider important – to assess which European proposals should be supported and which ones should be curbed, and to investigate what policy the Netherlands wants to lead with.

Coordination mechanisms

The European Commission and the member states can direct the development of the European research area via at least five types of coordination mechanisms: direction by the parties themselves; the Community route via Brussels; the intergovernmental route of agreements between national governments; organisations acting as intermediaries; or the Open Method of Coordination.

In this context, a pragmatic governmental attitude entails not making any decisions, on principle, for or against particular coordination mechanisms, but always weighing the advantages against the disadvantages of the mechanism in question in specific situations. It also means a national policy that allows one to respond to potential disadvantages. For example, in the case of direction by the parties themselves, how is it possible to prevent mismatching policy objectives? Or, how is it possible to prevent the research fragmentation that can occur were the intergovernmental route to be taken?

Policy instruments

The European instruments that are the centre of attention at the moment are: the coordination and opening up of national programmes; the framework programmes; Technology Platforms and a European Research Council (ERC). In the opinion of the AWT, there is an appropriate Dutch response to each of these policy instruments:

- *Coordination and opening up of national programmes:* participate fully in the coordination, merging or opening up of national programmes. But do so under conditions of reciprocity, and do it step-by-step and selectively. As the government (OCW and EZ), monitor the developments in this area.
- *Framework programmes:* use the framework programmes as a vehicle for developing our own 'knowledge assets'. In so doing, focus particularly on strengthening curiosity-driven research and on developing knowledge for international social issues. Focus also on the framework programme where it contributes to stimulating cooperation and mobility, and use the framework programme for the necessary large-scale investments in research facilities.
- *Technology Platforms:* participate actively in the development of Technology Platforms, contributing the Dutch experience with Top Technological Institutes. However, from the start, be careful to ensure that Technology Platforms do not get stuck at the knowledge development stage. Stimulate participation in Technology Platforms that are in line with our own national strengths, and in doing so, actively support the major Dutch players.
- *European Research Council:* use the *European Research Council* (ERC) above all to make known what our own strengths are in curiosity-driven research. However, do not expect everything from the ERC – there are other routes that make a greater contribution to the development of the European research area. Use the

Dutch presidency of the EU in the second half of 2004 to anticipate the risks of the ERC at its design stage, and to overcome them with compensatory measures.