

Summary of advisory report 44

INVESTING IN RESEARCH

The Advisory Council for Science and Technology Policy (AWT) has been asked to make recommendations on the organisation and financing of major research facilities. The report does not concern the research facilities to be invested in but rather the underlying investment philosophy of the government. The Council takes the view that government policy on major facilities cannot be seen separately from general science and technology policy. Facilities are not an end in themselves but a means to an end. Hence this report focuses on the question of what should be the priorities of government policy in encouraging research. The report then goes on to examine the consequences of that policy for major research facilities.

Research promotion policy

The Council observes that at the present time the government is willing to make extra investment in the knowledge infrastructure. The Council is not in favour of any additional investment being spent unconditionally to raise the regular budgets of the public sector universities and research institutes. The Council is advocating that additional sums be deployed in a targeted way to remedy structural bottlenecks. Two bottlenecks spring to mind:

- matching the national research potential to the social and economic needs of our society;
- scope for entirely new research lines.

Match between supply of and demand for knowledge

The match between supply and demand cannot be entirely left to the market mechanism in the opinion of the Council. That would result in a socially undesirable underinvestment in for example fundamental strategic research. The Council does see a major role for the government in making visible the social and economic need for knowledge and encouraging research in those domains. For many years now the government has been playing an active role by means of all kinds of stimulation programmes. The general picture is frequently one of relatively small investment impulses across a wide range of subjects. It is now thought desirable to make a bold stroke in a number of well-selected areas. Such powerful injections of resources are difficult if not impossible to achieve within the regular set of financial and stimulation instruments. It is partly from this point of view that the Council sees the existing, so-called ICES-KIS instrument as a welcome addition to the regular ones available.[1]

The ICES-KIS instrument has already been deployed on two earlier occasions; preparations are currently being made for it to be deployed for a third time. In the light of the experiences in the first two rounds the Council makes a number of recommendations for the new round:

- In previous rounds public private partnership was explicitly given priority. However, public private partnerships are not possible for all socially relevant subjects. The Council would advocate widening the concept of partnership to include public/public
-

partnerships that is to say cooperation between government and semi-government as applicant party and public research organisations. The Council sees the strength of the ICES-KIS instrument in the interaction between those supplying and those demanding knowledge, as emerges for one thing from the financial involvement of both parties. The demand may come from a private party but equally well from a public party.

- The Council advocates clear and open procedures and appropriate attention to the scientific potential of projects. By comparison with the preceding rounds major improvements are possible and desirable. The organisation of the selection process into three phases would be a good approach, beginning with an overall list of interesting themes in the field, then a short list from that general list and finally an open tender for each selected theme on the short list. It has to be clear who is responsible for which step. The responsibility for directing the process and the responsibility for the content have to be kept separate. The choice of themes from the general list for the short list is ultimately a political choice and hence the responsibility of the Cabinet. The choice of which projects are chosen within the selected themes should be made by independent experts in the Council's view.

Innovation

In earlier reports the Council asked for more scope in the existing system for new research lines: research off the beaten track, research into new or insufficiently developed areas. The Council is gratified to observe that its plea has prompted a response to judge by the first move made by the KNAW, NWO and VSNU for an innovative boost. The Council recommends that any extra funds for research should not be deployed by means of an unconditional increase in the regular direct and indirect grants but specifically to increase the budget for innovative impulses. The Council advocates that any additional funds should specifically be used for those domains which have been underfunded at NWO, namely research within the humanities and social sciences and research in the interfaces between disciplines or so-called interdisciplinary research.

Financing of major research facilities

In the past the government has financed knowledge institutes by means of separate budgets for running costs and investment expenditure. As part of this regime the government required an investment policy. In the course of time the government's role has changed. The knowledge institutes have been given the scope for integrated management and are now themselves responsible for allocating the funds among the various means of production. The consequence of this is that the government no longer needs to conduct its own independent overall investment policy. The government finances the institutions for a particular task and what the government now has to do is assess the institutions for their performance and on the strength of this draw their financial conclusions.

Even so from time to time there are investment needs which exceed the financial capacity of the universities and research institutes. For such incidental needs there must be a possibility of appealing to the government. The Council believes that in allocating extra government funds for such research facilities the same criteria should play a role as in research promotion policy. To what extent do the facilities contribute to improving the match between the supply of and the demand for knowledge and/or to what extent do the facilities contribute to stimulating new research lines? For each decision the question of international cooperation and co-financing must explicitly be asked.

[1] The ICES-instrument is a large budget made available by the government aimed at strengthening the Dutch economic structure. A part of this budget is set aside to support the knowledge infrastructure (ICES-KIS).