

DINNER/DISCUSSION SUMMARY

A Science Strategy for Scotland

Held at The Royal Society of Edinburgh, 22-26 George Street, Edinburgh EH2 2PQ
on Thursday 24th October 2002

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EMTA Scotland

In the Chair: The Rt Hon the Lord Jenkin of Roding

Speakers: Sir Muir Russell KCB FRSE

Permanent Secretary, Scottish Executive

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Chairman, Scottish Science Advisory Committee

Dr Chris Henshall

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The opening speakers outlined the measures, already taken and planned, to strengthen the science base in Scotland and the UK and, in particular, the role of the Scottish Science Advisory Committee (SSAC).

Following wide consultation a Scottish science strategy document had been published in August 2001 setting out the Scottish Executive's aspirations regarding the place of science in the Scottish economy and society. The document included fifty-five commitments and the recent spending round, which provided for a 20% increase in real terms in SHEFC funding for science and research over the planning period, underlined the Executive's determination to ensure that the strategy was carried forward effectively. Other initiatives included the appointment of a Minister for Science, improved joint working on science issues among the Departments of the Executive, the further promotion of commercialisation, the proposed establishment of Intermediate Technology Institutes, increased funding for science education and the creation of the SSAC to provide independent advice to the Executive on shaping the future of science in Scotland.

The SSAC had 18 members representing a wide range of interests. The Committee had established three working groups. The first was concerned with science education. It was

necessary to improve its quality generally, to

ensure that up-to-date equipment for teaching was available and to encourage greater uptake among young people of scientific subjects by, for example, identifying good role models among members of the scientific community who had been commercially successful.

The second group was considering how to strengthen the science base. The promotion of excellence was a key objective and would involve the realistic identification of priorities in a global context. Scotland had the potential for world excellence in only a limited number of sectors and hard choices in the allocation of resources would be needed. Cross-disciplinary research should be encouraged: in its present form the Research Assessment Exercise could be an obstacle to such collaboration. More generally, better "connectivity" was required among those concerned with developing the science base and between the science base and industry.

The third working group dealt with science and society. In this area it was particularly important that Scotland had appropriate links with the initiatives of the ESRC.

As regards the UK, a key policy document "Investing in Innovation" had been published this year. [www.ost.gov.uk/science-strategy.pdf] Significant additional funding was envisaged: as a

result of the 2002 spending round science expenditure would reach £3.01 bn.

by 2005/6, double the comparable expenditure in 1997/8. The aim was to provide funding for new science in key areas and to ensure the sustainability of established science. There would, in particular, be a permanent and expanded Science Research Infrastructure Fund (SRIF) to assist in re-invigorating the existing science base. In addition the dual support system was being reviewed to improve its effectiveness. As part of the changes it would be important that institutions recover the full economic costs of research. The commercial exploitation of the science base was also important and required the further strengthening of links with possible users in industry, both in the UK and abroad. Better co-ordination among the relevant organisations concerned with the science budget was needed. It was equally important that the role of science within Whitehall Departments was well co-ordinated and machinery was in place to achieve that. Ministers and officials of the Scottish Executive were invited to participate in the work of relevant groups in Whitehall to facilitate cross-border collaboration, where appropriate.

In discussion, concern was expressed about the need for the Research Councils to fund projects fully and about the problem of recovering the full costs of research from charities. It was also suggested that in the past there had been Government schemes – e.g. the pre-production scheme of the 1970s – which had been more effective than subsequent initiatives. In response it was argued that the proposed new approaches to the dual support system would help with Research Council project funding. As regards charities, the Government believed that it was already making its contribution through the funding of research infrastructure. More generally the present Government saw itself as having a strategic role in setting an appropriate framework rather than attempting micro-management through detailed, over-prescriptive grant schemes.

The absence in the audience of an adequate representation of scientists from industry was noted. Doubts were also expressed about whether increased funding for basic science would lead to more commercial exploitation. On the other hand, there were good examples in some sectors of effective collaboration between the research base and industry, particularly involving new high-tech businesses and also companies from abroad. It was recognised that the issue of intellectual property could be problematic since universities sometimes had an

exaggerated impression of the value of what they had.

The importance of engineering and technology was stressed and it was recognised that institutions, particularly those which did not have a strong science base, could make an important contribution through the supply of graduates and know-how into industry. It was important to promote a spectrum of research capability, from blue skies to applied. There was also potential value in the exchange of personnel between academia and industry. It was emphasised that SSAC was concerned, not only with the science base, but also with engineering and technology and technology transfer and its wide membership reflected that remit.

The difficulties of developing multi-disciplinary research were recognised but there were some good examples, eg collaborations between computational science and bio-science.

It was suggested that the biggest bottle-neck to progress was the difficulty in recruiting post-doctorate staff, partly because of the poor remuneration available. The recommendations of the Roberts Committee were relevant in this context. There was also the important challenge of encouraging more young people into science. The educational value of science centres, such as Edinburgh's Dynamic Earth, needed to be recognised and there was a problem about how the running costs of such centres could be funded.

The general conclusion of the discussion was that, while there were successes and much was being done to build on them, the Scottish strategy document should best be seen as a starting point and important challenges remained. As greater substance came to be given to the strategy, difficult choices would need to be made to ensure that the increased resources available were allocated to best effect. The SSAC would have a key role in providing advice to the Executive. Science strategy was also an area where effective linkages between the Scottish Executive and Whitehall were very important.

Gerry Wilson CB

The discussion was held under the Foundation's Rule that the speakers may be named but those who contribute in the discussion are not. None of the opinions stated are those of the Foundation which maintains a strictly neutral position.