

RCUK Science in Society Strategy

Background

The UK Research Councils, which fund around £2.6 billion of world-leading research annually, have a specific role to play in engagement with the public about research. Both collectively and individually the councils are committed to developing and promoting the exciting research carried out in the UK, but also actively raising public awareness of, and engagement with, science and innovation.

Our strategy reflects the high profile of Science in Society in the Government's 10-year Science and Innovation Framework, and also recognises the need to secure and sustain a supply of future scientists, engineers, technicians and mathematicians to support the science base which is critical to the UK economy.

The Research Councils, working together through Research Councils UK (RCUK) have therefore developed a Science in Society Strategy. This matches the high-level strategic goals of the Framework, and takes forward the key aims for the Research Councils, published by RCUK in May 2005. It amplifies these by presenting the strategic vision for the RCUK Science in Society programme over the next four years which enhances and coordinates the activities of the individual Research Councils. This will be reviewed as necessary in the light of the outcomes of CSR 2007.

The Strategy

The RCUK Science in Society strategy recognises both the value of research in enriching the nation's health, wealth, and culture, and also the underlying need to sustain public confidence in the Research Councils' independent and rigorous approach to its funding decisions.

It recognises that in order to do this it is necessary to increase opportunities for people of all ages and from all sectors of society to engage with research and researchers, and to contribute their views on the conduct and direction of research so that these may be considered in policy-making and planning.

As part of this, the Research Councils will conduct all their public engagement activity in accordance with evidence-based best practice, and strengthen the links between those conducting research into science in society and those delivering programmes of activity in this area.

The Councils will actively contribute to greater integration and collaboration between the various stakeholders involved in Science in Society activities in the UK. This may also involve, where appropriate, partnerships with organisations internationally.

Implementation

The RCUK Science in Society Group, representing the eight Research Councils and supported by the RCUK Science in Society Unit, will oversee implementation of the strategy. This will include responding to emerging scientific opportunities and public aspirations and concerns, maximising efficient delivery and ensuring effective evaluation. The Group will work closely with the RCUK Research Careers and Diversity Unit on areas of mutual interest, and will also, where appropriate, contribute to the strategic aims of other Research Council departments such as Knowledge Transfer and the joint RCUK press office.

AIM 1. Identify public attitudes to be considered in the conduct of research, and foster debate that will enable the public to contribute to Councils' policies and research strategies.

Strategy

The Research Councils will:

- Take a lead on researching public attitudes to issues relevant to Research Council funded research, and keep abreast of other relevant studies.
- Ensure that mechanisms are in place such that the outcomes of these studies are considered within individual Councils' planning and decision-making processes at appropriate levels.
- Communicate the outcomes of any Research Council public dialogue programmes to the relevant research communities, as well as making them accessible to the public.

Recent achievements, and ongoing activity

The Research Councils have:

- **Brought the public into their decision-making processes** through the use of lay and non-specialist advisory panels.
- **Collaboratively funded the "Nanodialogues" experiments** which will involve a local citizens' panel exploring and discussing Research Council decision-making in Nanotechnology, and provide evidence for best practice dialogue processes.
- **Engaged with the public in the area of research involving animals** by working together and with other partners to identify and respond to public attitudes in this field.
- **Commissioned a public consultation**, involving qualitative and quantitative research, into experiences, understanding and attitudes towards scientific research into ageing.

Future developments

The Research Councils will:

- **Launch a cross-Council programme of public engagement on Energy Research** which will inform our thinking and help create socially responsible science.
- **Lead the next government-sponsored national survey of public attitudes to science and technology**, ensuring that Research Council expertise informs this vital research into Science in Society issues.
- **Utilise and disseminate the world-class ESRC research into Science in Society**, ensuring that the science communication community has access to evidence-based best practice.
- **Engage the public on topics of wider public relevance** in order to enhance the Councils' understanding of public views in those areas and to demonstrate our commitment to openness and transparency.
- **Create and maintain good links with the OSI horizon scanning programme** to ensure Research Councils are aware of upcoming trends and issues and are able to respond in a timely and effective manner.

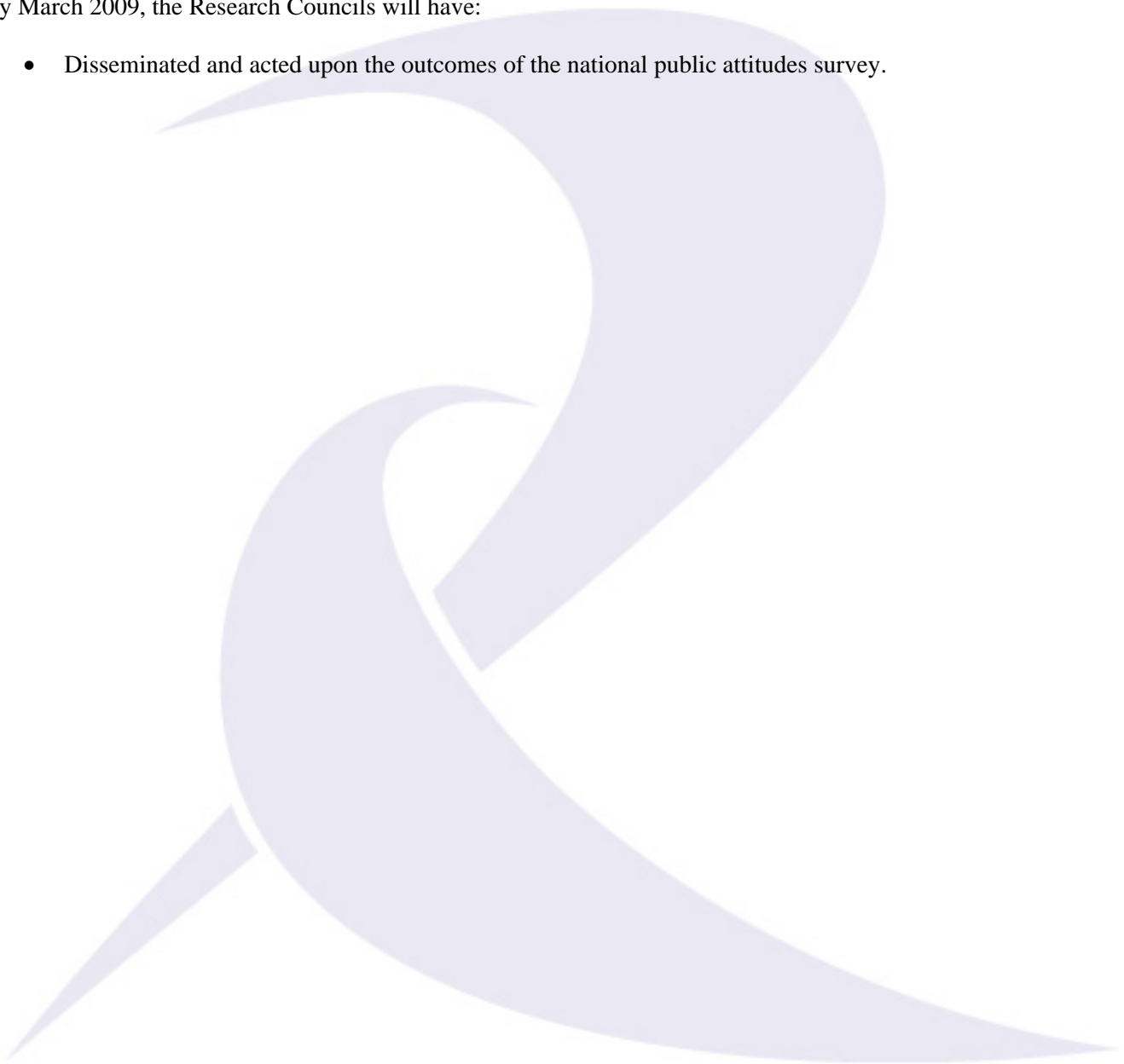
Targets

By March 2007, the Research Councils will have:

- Initiated a programme of Public Engagement on a number of topics of cross-Council relevance
- Identified upcoming trends and issues and incorporated them into Councils' programmes of activity.

By March 2009, the Research Councils will have:

- Disseminated and acted upon the outcomes of the national public attitudes survey.



AIM 2. Engage young people with contemporary research to enhance their experience of science, encouraging more to pursue science studies beyond 16 and follow R&D careers, and enabling more to act as informed citizens.

Strategy

The Research Councils will:

- Work to help to secure and sustain a supply of future scientists, engineers, technicians and mathematicians to support the science base which is critical to the UK economy.
- Engage with the process of educational policy-making at the highest level to increase the role of contemporary research in the school curriculum.
- Ensure that teachers, curriculum bodies and others involved in the post-primary classroom who wish to involve contemporary research have the opportunity to do so.
- Encourage partners who are delivering extra-curricular and informal education to include contemporary research contexts.

Recent achievements, and ongoing activity

The Research Councils have:

- **Collaboratively funded schemes such as Researchers in Residence, BA CREST, and the Nuffield Science Bursary Scheme.** These help teachers connect students with the excitement of the research process, something which universities and research institutes are best-placed to convey (as noted in the Roberts review).
- **Initiated a programme of Continuing Professional Development for teachers at the Science Learning Centres,** which connect science teachers with cutting edge research, giving them greater confidence with their teaching strategies and the topics they cover.
- **Disseminated the findings of ESRC's research into science education in schools,** enabling those involved in science education to understand the limits of what is currently known about what works and what doesn't work in the science classroom.

Future developments

The Research Councils will:

- **Further develop a programme of Continuing Professional Development for science teachers,** stimulating their interest in their subject and encouraging them to transmit their enthusiasm to their students. This will include courses held at Science Learning Centres, and visits to, and placements at, universities and research institutes.
- **Increase their involvement in the development of the school curriculum,** through strategic partnerships with organisations including QCA, the Awarding Bodies, DfES, the Royal Academy of Engineering and The Science Council. This will ensure that what is taught in schools adequately reflects the need to develop the UK's STEM skills base.
- **Further develop strategic partnerships with bodies involved in the provision of enrichment activities for students,** to bring the excitement of Council funded science into extra-curricular activities for post-

primary students. Partners will include the National and Regional Science Learning Centres, the ASE, the BA and the Nuffield Foundation.

- **Sponsor the ASE's schoolsience.co.uk website** on an annual basis with continued support subject to review, to enable it to become the single portal for teachers to access resources relating to all aspects of school science at all ages. Publicise the site as the way for anyone to find classroom materials on Research Council-funded research.
- **Further develop the evidence base relating to school science** in general, and the factors affecting subject choice in schools in particular. This will include work with ESRC's knowledge transfer department to disseminate the findings of that research to relevant audiences in government, education and academia.
- **Undertake a three-yearly external, independent review** of all Research Council activity in the education field, to give external validation of the positioning of the programme in relation to the STEM curriculum and the other activities going on in the STEM field.

Targets

By March 2007, the Research Councils will have:

- Analysed and acted upon the outcomes of an external, independent review of Research Councils activity.
- Completed a tender exercise to award a contract to run Researchers in Residence for the period 2006-9.
- Run and evaluated a series of four pilot courses for teachers at Science Learning Centres, and if successful, sought further funding for an expanded scheme from CSR2007.
- Ensured that all new joint Research Council education activities are in collaboration with strategic partners.
- Made all Research Council funded schools resources available through schoolsience.co.uk.

AIM 3. Encourage researchers funded by the Councils to engage with the public and to participate in activities that benefit the relationship between science and society, and support and reward those who do so.

Strategy

The Research Councils will:

- Continue to provide flexible and responsive funding, training and best practice support to enable Research Council funded researchers to develop the capacity and capability to engage with the public effectively and sustainably.
- Work with partners to improve recognition and rewards for researchers who engage with the public, and to achieve a more positive culture for public engagement.

Recent achievements, and ongoing activity

The Research Councils have:

- **Collaboratively funded public engagement schemes** such as RCUK National Science Week Awards and BA Perspectives, which provide researchers with training, support and rewards for public engagement activity.
- **Worked together to produce RCUK/OST best practice guides** on Dialogue with the Public and Evaluation of Science and Society Programmes, ensuring that evidence-based methodologies are promoted throughout the science communication field.
- **Supported Royal Society research to identify and analyse the barriers to researchers' involvement in science communication**, and are working with partners to address and remove these hurdles.

Future developments

The Research Councils will:

- **Work with partners (including OST, HEFCE, SFC, HEFCW, DELNI, and NESTA) to explore the opportunity for a national Public Engagement Unit** which would provide a single point of contact and best practice support to all researchers.
- **Partner the Public Engagement Reward Scheme** with HEFCE, the BA, Wellcome and others; which will encourage institutional support for public engagement, as well as rewarding excellence in the field.
- **Create a joint public engagement grant funding framework for all researchers**; administered through JeS, incorporating themed calls, all topic areas and levels of award, and allowing for grants at full economic costing at all stages in a researcher's career.
- **Work together to produce a unified set of best practice guidelines for researchers on public engagement**, presenting the most up-to-date information in a coherent and easily accessible manner.
- **Agree a statement of expectation regarding public engagement which applies to all research grants**, ensuring that public engagement is recognised as an important part of UK research.
- **Work jointly, and with the RCUK Research Careers and Diversity Unit, to create a single RCUK programme of training for researchers** at every level, in all forms of engagement, including specialist topic support where appropriate.

Targets

By March 2007, the Research Councils will have:

- Reported on the possibility of collaborating with key partners to run a combined UK Public Engagement Unit.
- Launched a new reward scheme for researchers with HEFCE and other key partners.

By March 2009, the Research Councils will have:

- Developed an implementation plan for the launch of a single Public Engagement Grant framework for researchers.
- Published a unified set of the Research Councils' best practice guidelines on Public Engagement.
- Published a statement of expectation regarding Public Engagement which applies to all research grants.
- Developed an implementation plan for the launch of a single programme of Public Engagement training available for researchers.

AIM 4. Increase public awareness of the developments, achievements and impacts that flow from Research Council funded research.

Strategy

The Research Councils will:

- Promote an increased awareness of research and the scientific process among non-specialist audiences, by working in partnership with expert deliverers such as the mass media and regional science centres to ensure that the public have open access to the outcomes of Research Councils' investment in world-leading research.

Recent achievements, and ongoing activity

The Research Councils have:

- **Produced joint publications and exhibitions on issues of common research interest**, such as the Move Over Einstein touring exhibition aimed at showcasing contemporary physics. This was primarily designed for young people, but was exhibited in museums, shopping centres, and science centres during Einstein Year.
- **Supported regional science festivals, the BA Festival of Science and National Science Week**, including involvement in the Science Festivals in Cheltenham, Oxfordshire and Edinburgh.
- **Jointly funded the Science Media Centre**, an independent venture working to promote the voices, stories and views of the scientific community to the news media when science is in the headlines.
- **Established an RCUK press office** (within the RCUK Secretariat) which co-ordinates press activity relating to cross-Council projects and areas for which more than one Council has an interest. This provides a single point of contact for journalists with regard to research areas funded by more than one Council to provide them with as high a public profile as is reasonably possible.

Future developments

The Research Councils will:

- **Initiate a series of mass participation public engagement activities** involving a partner from the mass media. This will enable upstream public debate about priorities in research, with the aim of enhancing public confidence in the process of science, research and innovation.
- **Further develop their joint approach to National Science Week**, enabling Research Council work to be jointly presented to a wider audience.
- **Further develop their joint approach to the BA Festival of Science**, using it to raise awareness of the issues surrounding research in the UK.
- **Develop a joint approach to Research Councils' involvement in science centres, science & arts festivals and exhibitions**, bringing together the combined resources of the Councils to achieve increased prominence for the Research Councils both regionally and nationally.

Targets

By March 2007, the Research Councils will have:

- Completed the review of their involvement in science centres, science & arts festivals and exhibitions, and agreed a joint approach.
- Reported on the possibility of a large scale media project in collaboration with the BBC

