## RCUK Annual Delivery Plan Report 2006/7

## **Executive Summary**

The Research Councils UK (RCUK) partnership enables the eight (now seven) UK Research Councils to work together efficiently and effectively to enhance the overall impact and effectiveness of their research, training, and innovation activities, contributing to the delivery of the Government's objectives for science and innovation.

This report records RCUK's progress against its objectives as defined in the RCUK Delivery Plan published in May 2006. The structure and content are in accordance with the reporting requirements as specified by the Office of Science and Innovation (OSI) and the report should be read in conjunction with the individual Research Councils' reports.

2006-07 has been an effective year for RCUK with the majority of objectives and milestones scheduled for 2006-07 successfully achieved. Major successes have included the successful coordination of the Research Councils' evidence and inputs to the Comprehensive Spending Review (CSR), launching a comprehensive new programme of work aimed at increasing and demonstrating an increase in the economic impact of the Councils' activities, and a major project to establish a shared services centre for the Research Councils and their institutes.

Joint working through RCUK has also continued to enhance a wide spectrum of other Research Council activities and operations during 2006-07 including increased collaboration on research careers, science in society, multidisciplinary research, international collaboration, and pay harmonisation.

## **Recent Successes**

The key successes of RCUK in 2006-07 were:

- Coordinating the effective engagement of the Research Councils with OSI in developing the arguments and evidence base for the Science Budget bid;
- Development of a coherent package of RCUK priorities for the CSR period encompassing financial sustainability, health of disciplines, multidisciplinary research, research careers, increasing knowledge transfer and economic impact, public engagement and increasing international collaboration, and delivering efficiencies through changes to peer review and the creation of the shared services centre;
- Development of a comprehensive RCUK action plan responding to the recommendations made by the House of Commons Science and Technology Select Committee and the Warry Report on 'Increasing the Economic Impact of the Research Councils', including:
  - creation of a new programme of work aimed at increasing and demonstrating an increase in the economic impact of Councils' activities;
  - o launch of the 'Impacts: Successes from UK Research' brochure in conjunction with Universities UK and Unico at a Parliamentary Breakfast event to increase awareness of the economic impact of Research Councils' investments;
- Introduction of a revised agreement for handling research proposals which cut across the remits of the individual Research Councils and publication of revised guidance on the eligibility for Science Budget funding;
- Completion of the first phase of the RCUK Efficiency and Effectiveness of Peer Review Project and subsequent consultation;

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- Completion and publication of the RCUK Research Careers and Diversity Strategy in January;
- Establishment of the Shared Services Centre Implementation Project and successful completion of gateway one in January;
- Launch of the new RCUK website in October;
- Launch of a new £8 million 'Beacons for Public Engagement' initiative.

## **Progress in management**

The main changes in the management and operation of RCUK activities during 2006-07 were:

- Re-election of Professor Ian Diamond as the Chair of the RCUK Executive Group;
- Achievement of £162.36 million of efficiency savings against a collective target of £115.50 million for 2006-07, managed and delivered via the RCUK Efficiency Delivery Project;
- Establishment of the Shared Services Centre Implementation Project, including the appointment of the Project Director;
- Reshaping of the role and representation of the RCUK Knowledge Transfer Group to form the new RCUK Knowledge Transfer and Economic Impact Group;
- An increase in the complement of the RCUK Secretariat by 1.4 FTE, including the appointment of the RCUK Knowledge Transfer and Economic Impact Programme Manager;
- Agreement of a new dedicated programme budget for the RCUK Science in Society Unit, to underpin the delivery of the RCUK Science in Society strategy;
- Effective collaboration with the National Audit Office (NAO) on their review of RCUK governance arrangements, and completion of an action plan for strengthening business planning;
- Development and launch of a new RCUK extranet, providing document libraries, discussion forums, and shared web spaces for all major RCUK cross-Council groups and projects.

# PROGRESS TO DATE AGAINST TARGETS AND MILESTONES

RCUK successfully achieved the majority of its objectives and milestones scheduled for 2006-07, with no major changes required. Of the 96 milestones scheduled for 2006-07, 93 are green (including 60 completed), three are amber, and none are red.

Commentary on progress including the main highlights and achievements is set out below using the same headings as in the RCUK Delivery Plan.

# Support for multidisciplinary research and cross-Council research programmes

## Promoting the sustainability of the UK research base

RCUK published the second annual report examining the health of the UK research base following consideration by the UK Research Base Funders' Forum in January 2007. The health of the UK research base remains a priority for the Research Councils and throughout 2006-07 the Research Councils have continued to tackle the challenges identified in relation to the health of specific disciplines and sub-disciplines. In collaboration with the Higher Education Funding Bodies, the Research Councils have continued to implement a number of capacity building schemes to address areas of immediate concern, for example, the high profile Science and Innovation Awards.

## Supporting multidisciplinary research

A revised cross-Council funding agreement for assessing and funding responsive mode research applications which straddle the Research Councils' remits was introduced in September 2006. The substantially revised protocol provides clearer guidance to applicants and establishes new co-funding arrangements between Councils eliminating double jeopardy.

RCUK provided comprehensive evidence on how the Councils stimulate, fund, and support multidisciplinary research to the Government's "Science and Innovation Investment Framework Next Steps" consultation.

## Portfolio of multidisciplinary research

Following a joint workshop in July 2006 to identify new and emerging multidisciplinary areas and share good practice in research management, RDG took the lead in identifying and developing potential cross-Council multidisciplinary research opportunities for the CSR period, building on the outputs from earlier cross-Council programmes and taking account of individual Council's future plans. The Research Councils worked together throughout 2006-07 on developing six research proposals, exploring potential funding opportunities, stakeholder engagement, and governance and delivery arrangements. These research priorities were highlighted in the arguments made to HMT as part of the successful Science Budget bid.

RCUK is continuing to monitor the portfolio of multidisciplinary research supported by the Councils. A summary highlighting the full range of multidisciplinary research supported both across and within the Research Councils and its impacts will be published in Q2 2007-08.

## Management and coordination of cross-Council research programmes

The coordination and promotion of good practice in the management of the current cross-Council research programmes remains a fundamental area where RCUK adds value. A good practice workshop on the management and evaluation of large, directed programmes was held in May 2006 and the RCUK Executive Group considered annual reports from each programme in November 2006. RCUKEG will assign a Chief Executive champion to each of new the major cross-Research Councils programmes funded during the CSR period.

#### **International Collaboration**

## **UK International Strategy for science and innovation**

Throughout the year, RCUK has focused on increasing the degree of coordination on Research Councils' international activities. Chief Executives discussed the implementation of the Government's strategy of international R&D collaboration with the Chief Scientific Adviser in October, and are contributing to the delivery of this strategy including leading on the implementation of recommendation one (access to funding for international collaboration).

Proposals for creating a new RCUK international team have been developed and agreed by RCUKEG and will be implemented in 2007-08. The RCUK International Strategy also been developed and will be published in Q1 2007-08.

The Research Councils have worked with UK Trade and Investment on their R&D inward investment project, contributing information on the success of the UK research base for marketing material and mapping current engagement with target companies.

#### **Europe**

Europe is a principal focus for the Research Councils and, working together as RCUK, the Research Councils are proactively engaged in the European agenda, representing UK interests within Europe (for example, at the European Heads of Research Councils group and on the European Strategy Forum for Research Infrastructures), inputting to the development of Framework Programme Seven, and ensuring that the European Research Council (ERC) has access to UK best practice in research funding and management.

The Research Councils have continued to jointly sponsor the UK Research Office in Brussels which provides an effective presence for the Councils at the heart of Europe.

## **Beyond Europe**

In July 2006, the Research Councils agreed to establish an RCUK Office in China. The Office will provide a distinct and high profile presence to represent the UK research community and promote collaboration between UK researchers and their Chinese counterparts. During the year, work has been undertaken in the UK and in Beijing to put the necessary infrastructure in place, and a Director of the Office has been appointed. Following official approval by the Chinese Government the Office will be officially launched in Q2 2007-08 with a high profile ministerial event.

The Research Councils also agreed to establish an RCUK Office in the US. Located in Washington, the Office will strengthen relations between UK and US funding agencies. Preparatory work is underway and subject to US Government approval an official launch is planned for Q3 2007-08.

Following the completion of a major review of development sciences in the UK, led by ESRC on behalf of RCUK, the Research Councils are participating alongside the Department for International Development, OSI, and the Wellcome Trust in a new UK Collaborative on Development Science, ensuring that research funded by the Research Councils contributes to international development. The Secretariat for the Collaborative will be hosted by BBSRC on behalf of all of the partners.

## **Large Facilities**

# **Prioritisation of Large Facilities Projects for the allocation of the Large Facilities Capital Fund**

In June 2006 RCUK published the outcomes of the latest prioritisation exercise for the allocation of funding from the Large Facilities Capital Fund, supporting UK investment in priority world class facilities projects.

## Coordination of Research Councils' strategic engagement in large infrastructure activities

RCUK coordinated the Research Councils' engagement with the NAO's audit of the Large Facilities Capital Fund, providing evidence and information, producing an initial response to the recommendations and briefing for the Public Accounts Committee hearing. RCUK also analysed the likely demand for capital funding during the period 2008-09 to 2010-11 and advised OSI on future funding needs.

In response to the publication of the European Strategy Forum for Research Infrastructures European large facilities roadmap in October, RCUK completed an analysis of potential UK interest in new European facilities for the OSI.

The Diamond Research Complex business case was endorsed by the RCUK Executive Group in April and a recommendation for the release of funds from the Large Facilities Capital Fund agreed.

## **Research Careers and Diversity**

## **RCUK Research Careers and Diversity Strategy**

The RCUK research careers and diversity strategy was published in January 2007, alongside a glossy brochure highlighting the aims of the strategy. The strategy sets out the Research Councils' joint vision and priorities for research training and careers and to promote diversity within the research workforce, led through the RCUK Research Careers and Diversity Unit.

#### Roberts' skills funds

Two reports on the effectiveness of the RCUK Academic Fellowships and the effectiveness of Research Council funded researcher salary increases (both student stipends and salaries for research staff) in increasing participation by high quality researchers were published in July and August 2006; at least 50 per cent of universities reported more activity in support of post-doctoral researchers during 2006-07 or plan to do more in 2007-08.

A full day conference for over 100 RCUK Academic Fellows was held in January 2008. The successful event focussed on outreach activities and attracted press coverage.

## **Postgraduate Training**

The Doctoral Training Account (DTA)/Doctoral Training Grant (DTG) model continues to develop across the Research Councils: EPSRC, MRC and BBSRC grants have been announced with common terms and conditions; PPARC has developed a DTG model for its studentships from 2007; NERC has developed a DTG model for its studentships from 2008; and ESRC has introduced a devolved studentship payment system more in line with the DTA system.

To bring outstanding students from India, China, South Africa, Brazil, Russia and the developing world to study for doctorates in top rated UK research facilities, the Dorothy Hodgkin Postgraduate Award scheme made 80 core awards and 23 additional awards to universities in 2006.

The UKGRAD programme was successfully re-tendered and re-negotiated in March 2007 with a new vision for the development of both postgraduate and post-doctoral researchers.

## **Research Careers and Fellowships**

RCUK and Universities UK led a joint Higher Education sector project to publish a webbased document mapping the provisions of the European Charter and Code onto existing UK guidance and practice documents in November 2007. In most cases the UK already meets the requirements of the European Charter and Code with no major conflicts with current practice in the UK. A working group of Funders representatives, Universities UK and selected representatives of the sector has subsequently established a draft set of principles and text for the revision of the UK concordat for career management of research staff.

A development website for the Research Careers Mapping Tool has been created by the Research Councils, in association with the Wellcome Trust and the Royal Society. A test version will be launched in Q1 2007-08.

## **Diversity**

In February 2007, RCUK signed a Memorandum of Understanding with the UK Resource Centre for Women in Science, Engineering and Technology. This encompasses a wider range of interactions including joint promotion of the flexibility of research funding, dispelling myths about research grants, contracts and career paths, addressing the barriers for women returning to SET research careers etc.

RCUK also agreed to participate in a project led by the Equality Challenge Unit to carry out a meta-analysis of diversity within higher education. RCUK involvement will ensure that postgraduate research is a major feature.

## **Innovation and Knowledge Transfer (KT)**

## Monitoring the KT portfolio

Building on the success of previous years, the Research Councils again joined forces during 2006-07 to deliver a number of cross-Council knowledge transfer schemes, including the Young Entrepreneur Scheme, and the Business Plan Competition. Warwick Warp, winners of the 2005-06 business plan competition, were presented with their award by the Science Minister in December 2006.

RCUK commissioned an external consultancy to provide independent advice on the scope for rationalisation, the dissemination of good practice, and the joint branding/presentation of Research Councils' KT schemes and initiatives.

## **Engagement with the Technology Strategy Board (TSB)**

The Research Councils have a strong working relationship with the TSB and have continued to work with them on the identification of technology priorities relevant to their communities. During 2006-07 the Councils have continued to be actively engaged in many TSB and wider DTI initiatives including Collaborative R&D, Knowledge Transfer Partnerships, Knowledge Transfer Networks and Innovation Platforms. RCUK has continued to second a Research Council employee to the TSB to act as the liaison point with the Technology Programme.

The establishment of the TSB as an arms-length Non-Departmental Public Body and the broadening of its remit present exciting opportunities for the Research Councils and the TSB to deepen their collaboration, expanding into new sectors such as the creative industries or financial services. The RCUK Executive Group met with the Chair of the TSB in February to discuss new opportunities and further dialogue is underway.

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## **Engagement with the Regional Development Agencies (RDAs)**

The Research Councils continue to work both collectively and individually with the RDAs and their devolved counterparts through a variety of interactions and activities, including meetings, workshops and more indirect routes via intermediaries. For example, in February 2007 EPSRC hosted a study tour involving representatives of the RDAs and Research Councils to explore scope for joint working.

## **Economic impact of Research Councils' investments**

This has been a major activity for RCUK in 2006-07. Following the House of Commons Science and Technology Committee scrutiny of Councils' KT activities and the Warry report, RCUK published the RCUK action plan 'Increasing the Economic Impact of the Research Councils' in January.

Actions taken include the establishment of a new RCUK KT and Economic Impact Programme, the appointment of Professor Esler (Chief Executive of AHRC) to champion the KT agenda on behalf of RCUK, and the restructuring of how knowledge transfer is managed within the RCUK framework. In addition to the work looking at the potential for harmonising Councils' KT schemes, two other studies have been commissioned by RCUK: one to assess the economic impact of the Research Councils' activities and establish a baseline for future assessments, and a user satisfaction survey to determine users' level of satisfaction with the Research Councils' operations and effectiveness.

Raising awareness of the Research Councils' contribution to the UK economy has also been a major component of the RCUK external relations programme in 2006-07.

## **Science and Society**

#### **Public attitudes and debate**

The RCUK Science in Society Unit, working closely with the RCUK Energy Research Programme, developed an energy public dialogue project which will increase accountability for RCUK decision-making by ensuring that public views are considered alongside other advice streams.

The RCUK Science in Society Unit is also leading the next major UK survey of public attitudes to science (funded by OSI).

#### **Engaging young people**

An increasing number of science in society projects now cover all of the Research Councils as a result of joint working through the RCUK Science in Society Unit. For example, following a positive evaluation of the British Association's CREST scheme, incorporation of social sciences into the scheme was piloted in 2006-07. The contract to run Researchers in Residence for the period 2006 to 2009, on behalf of all the Research Councils, was awarded to a consortium led by the University of Edinburgh in October 2006 and the Research Councils signed a three year contract for Research Council involvement in the Nuffield Bursaries scheme.

In response to the call from government to co-ordinate the availability of resources to enhance the science curriculum, the Research Councils have worked with the Association for Science Education to ensure that all materials developed by the Research Councils for school pupils or teachers can now be found through a single portal, Schoolscience.co.uk. The site went live at the ASE conference in January 2007 with the official launch in June/July 2007.

The Science Learning Centres Teacher Continuing Professional Development project to deliver research update courses to science teachers has proved to be the most successful set of courses ever run by the Department for Education and Schools funded Science Learning Centres.

#### **Encouraging researchers**

RCUK received an overwhelming response from the academic community to their £8 million 'Beacons for Public Engagement' initiative, with almost 90 applications for the initiative which aims to fund around six Beacons. By working in partnership with HEFCE, SFC, HEFCW and the Wellcome Trust, RCUK have secured matched funding and launched one of the biggest projects to support public engagement ever seen in this country and significantly raised the profile of the Research Councils amongst the community.

For the first time in 2007, the RCUK National Science Week Awards were open to researchers funded by any of the eight Research Councils.

# Increasing the collective policy influence and visibility of the Research Councils

## Collective policy influence

The major achievement in this area has been the coordination of Research Councils' engagement with OSI in developing the arguments and evidence base for the Science Budget bid. This included the development and presentation of a coherent package of RCUK priorities for the CSR period encompassing financial sustainability, health of disciplines, multidisciplinary research, research careers, increasing KT and economic impact, public engagement and increasing international collaboration, and delivering efficiencies through changes to peer review and the creation of the shared services centre.

RCUK has also facilitated and enabled a wide range of other activities aimed at raising the collective policy influence of the Research Councils, including:

- Chief Executives and senior staff represented the Research Councils collectively on key
  advisory and policy making bodies including the UK Research Base Funders' Forum,
  TSB, European Heads of Research Councils, European Science Foundation, and
  European Strategy Forum for Research Infrastructures (in addition there are many
  operational and working level groups with RCUK representation);
- Senior policy makers and influencers met with the RCUK Executive Group, including: Professor Drummond Bone (Universities UK), Sir David King (Government's Chief Scientific Advisor), Steve O'Leary (UK Trade and Industry), Professor David Eastwood (Higher Education Funding Council for England), Professor Graham Spittle (TSB), and Sir Keith Peters (Council for Science and Technology);
- RCUK coordinated the Research Councils' input to the Government's "Science and Innovation Investment Framework Next Steps" consultation and the subsequent response to the recommendations, focusing on support for multidisciplinary and "risky" research and stimulating university-business collaboration and KT;
- As well as regular Chief Executive and officer level engagement with the Higher Education Funding Councils, RCUK coordinated the Research Councils' involvement with the HEFCE consultation on the future of the RAE and is continuing to work with HEFCE as work on developing a metrics based framework commences;
- RCUK has been closely engaged with the Sainsbury Review. Inputs were provided to the review team in January 2007 on the international activities of the Research Councils and RCUK has also been in dialogue with the review team on fellowships, science bridges, and knowledge transfer and economic impact;
- RCUK has continued to work closely with the Council for Science and Technology (CST) sharing information on RCUK priorities, CST's work programme and collaborative activities. In 2006-07, Councils made substantial inputs into the CST's research endeavour project;

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- RCUK has increased its degree of engagement with UUK, with more meetings at Chief Executive and operational levels to take advantage of greater opportunities for collaborative activities. Successes included forging new links on KT and innovation, leading to joint RCUK-UUK Parliamentary event and dialogue on international issues;
- The RCUK Secretariat coordinated the RCUK response to 13 Parliamentary Questions and evidence to 10 Parliamentary inquiries and 18 Government consultations.

## **Collective Visibility**

The RCUK external relations programme for 2005-06 was reviewed in July 2006. The 2006-07 RCUK external relations programme was significantly refocused on the knowledge transfer and innovation agenda. Highlights included:

- Launch of the 'Impacts: Successes from UK Research' brochure in conjunction with Universities UK and Unico at a Parliamentary Breakfast event to increase awareness of the economic impact of Research Councils' investments;
- Contributions to the UK Trade and Industry marketing brochure for research and development inward investment project;
- Publication of 'Adding Value: how the Research Councils benefit the economy'.

In addition to the portfolio of knowledge transfer activities other highlights from the RCUK external relations programme included:

- Launch of a monthly e-bulletin to provide up to date information on the collective activities of the UK Research Councils, working together as the RCUK partnership;
- Launch of the new RCUK website providing comprehensive information about RCUK activities and access to information on common issues from individual Council sites;
- Development and launch of the RCUK news service to provide regular information about the Research Councils for the Science Minister;
- Publication of 28 RCUK press releases;
- The RCUK Secretariat team supported an RCUK presence at more than 29 events, including GovNet: Science and Innovation event; and the Times Higher Awards dinner.

An annual report of RCUK activities for 2006-07 will be published in Q1 2007-08.

# **Efficiency and Effectiveness of Research Council Operations Full Economic Costing (FEC)**

Collectively the Research Councils have continued to monitor the impact of the implementation of FEC on a quarterly basis and completed extensive modelling work which informed the OSI arguments for the Science Budget funding needed to support the current volume of research at 80 per cent of FEC.

## **Research Administration processes and systems**

The Joint Electronic Submission (JeS) system provides universities with a single electronic interface for submitting research proposals, significantly easing the complexity of the Research Council grant system for external stakeholders. The system is being extended to cover post-application processes and an ESRC pilot of peer review document exchange will go live in Q1 2007-08 with full implementation scheduled for completion in Q2 2007-08.

## Efficiency of peer review

In 2006-07 RCUK undertook a major project to assess the efficiency and effectiveness of peer review. Following an initial study RCUK published a report on the efficiency and value for

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money of peer review in October. This identified a number of options that could help improve the efficiency and effectiveness of the peer review process and the Research Councils subsequently published a consultation document inviting organisations with an interest in peer review to submit their views. The consultation closed in January and following a detailed analysis of the responses, Councils are in the process of developing an implementation plan. The final report and action plan will be published in summer 2007.

#### **RCUK Efficiency Delivery Project**

In 2006-07, RCUK achieved efficiency gains of £162.36 million against a collective target of £115.50 million. The project received a green status at the Gateway 4 review in May 2006.

## Shared delivery of administrative services

As part of the Research Council's contribution to the Government's efficiency agenda, RCUK agreed to develop and implement plans for the provision of shared services to all of the Research Councils and their institutes by 2009. A detailed roadmap setting out plans for the integration of services including an outline business case for implementing the preferred option and a plan to achieve the 2009 target was approved by the RCUK Executive Group in April and a major implementation project launched in May. On-going work on the RCUK administration strategy and many of the projects to harmonise administrative activities have been rolled into this shared services centre project. In January, the Project successfully completed OGC Gateway 1 Review and rapid progress is continuing to be made towards the agreed milestones.

In addition, RCUK has continued to develop proposals and a business case for the harmonisation of pay, terms and conditions for Research Council staff. The RCUK Executive Group will take a decision on this in 2007-08.

## **Future targets/milestones**

The RCUK delivery plan and scorecard were updated in May 2007 to reflect the announcement of the Science Budget settlement for 2008-09 to 2010 in April, and changes to priorities, particularly the programme of work outlined in the RCUK action plan for increasing the economic impact of Research Councils. The refreshed RCUK delivery plan also reflects the recommendations of the NAO Good Governance Report.

Full details of the targets and milestones for the 2007-08 period can be found in the 2007-08 scorecard. The major new priorities and objectives incorporated include:

- Planning the prioritisation and means for delivery of the RCUK portfolio for the CSR period including the materials and information to enable RCUKEG to allocate resources to RCUK activities;
- Completion and publication of the RCUK international strategy and the establishment of an RCUK international team to deliver better coordination of international issues across the Research Councils;
- Launch of an RCUK office in China to raise awareness of the UK research capability and stimulate new collaborations between UK and Chinese researchers;
- Launch of an RCUK office in the US to strengthen relations between research funding bodies and stimulate collaborative opportunities between UK and US researchers;
- Achieving significant progress in the delivery of the RCUK KT and economic impact programme, RCUK will deliver a comprehensive report to Government, one year on from the Warry report;
- Development and implementation of proposals for substantially increasing collaboration between the Research Councils and the TSB;
- Revision of the scope and content of the Large Facilities Roadmap and the prioritisation exercise for access to the Large Facilities Capital Fund;
- Achieving substantial progress towards the implementation of the Shared Services
   Centre the Implementation Project will deliver a Full Business Case by September,
   defining the structure of shared services and detailing how this will be implemented and
   delivered.