

RCUK ANNUAL DELIVERY PLAN REPORT, 2008-09

1. EXECUTIVE SUMMARY

The Research Councils UK (RCUK) partnership enables the 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 April 2008. The structure and content are in accordance with the reporting requirements as specified by the former Department for Innovation, Universities and Skills (DIUS) and the report should be read in conjunction with the individual Research Councils' reports.

With the majority of milestones and objectives for 2008-09 having been achieved, this has been a successful year for RCUK. Major successes have included significant progress in further co-ordination of the Councils' international activities (including the opening of an overseas office in India and building upon the work of the overseas offices in Washington and Beijing), launching the Concordat and Vitae programs, launching the cross-Council research themes and the first "go-live" stage of the Shared Services Centre for the Research Councils and their institutes.

2. RECENT SUCCESSES

Some of the key successes of RCUK in 2008/09 included:

Cross-Council Research Agenda

- Launch of the six cross-Council priority research themes and development of their plans for evaluation, communications, knowledge exchange, skills, public engagement and international working.
- Publication in July 2008 of the *Large Facilities Roadmap* and evaluating the process for the production of the roadmap and prioritisation of projects for the Large Facilities Capital Fund to ensure lessons learned for the future.

RCUK International

- RCUK launched its third overseas office in New Delhi, India, in October 2008.
- Establishment of the Research Councils Europe Group to facilitate strategic engagement at the European level.

- Increased engagement with other UK stakeholders in international collaboration to improve the coherence and effectiveness of the UK international effort.

Research Careers and Diversity

- Launch of the *Concordat to Support the Career Development of Researchers* in June 2008 and the subsequent engagement by the sector to take forward its implementation.
- Launch of the Vitae programme to champion the professional and career development of both doctoral researchers and research staff in June 2008.

Innovation and Knowledge Transfer

- *Excellence with Impact* (published October 2007) set out a challenging suite of activities, aimed at increasing the economic impact of Research Council investments. All of these activities have been completed or are well under way. Highlights include:
 - introduction of the RCUK Knowledge Transfer Portal;
 - changes to peer review to reflect both excellence and impact considerations;
 - accumulation of a body of evidence to understand and demonstrate economic impact.

Science in Society

- Significant development of RCUK SiS policy and practice. The refreshment of the Research Councils UK Science in Society vision and strategy was completed at the end of March 2008 and placed in the public domain. This will be updated and colour published later on in 2009.
- Ongoing development of Beacons for Public Engagement project and its future. SiS team has gathered evidence from across the Research Councils demonstrating the benefits of public engagement activities to researchers and their research. A publication aimed at the research community will be the first major output of this work in 2009.
- Commissioning a major new project to bring contemporary research into UK classrooms through teacher CPD. Following pilot phases between 2006 and 2008, RCUK SiS team commissioned the £1 million Contemporary Science in the Classroom project (over three years) in 2009. The Science Learning Centre Network will be exploring opportunities for links to a range of Research Council funded research, Institutes and facilities. Another major focus will be on exploring ways in which Maths teaching can be supported through the scheme and developing the benefits researchers get from taking part in the scheme.

Policy Influence and Visibility

- Launch in February 2009 of *A Winning Blend* which highlighted successful outcomes of flagship multidisciplinary programmes supported since the 1998 Comprehensive Spending Review and the current six cross-Council priority theme areas.
- Development of a future strategy for cross-Council working in the next spending review within the document *Unlocking the future: Challenges for research and society*.
- Response to the UK Commission for Employment and Skills Consultation: *Delivering a World-Class, High Skilled Workforce in the UK*.

Administrative Harmonisation

- Significant progress towards bringing major back-office functions of the Research Councils together in the new Shared Service Centre.

3. PROGRESS IN MANAGEMENT

The main developments in the management and operation of RCUK activities during 2008/10 have been:

- The re-election of Professor Ian Diamond as Chair of the RCUK Executive Group until September 2009 and the election of Professor Alan Thorpe to this role from October 2009.
- Changes to the Chief Executive champion roles as follows:
 - *International and EU*: Sir Leszek Borysiewicz continues in this role.
 - *Knowledge Transfer and Economic Impact*: Professor Phillip Esler (AHRC) continues in this role until the end of March 2009. From April 2009, Professor Dave Delpy (EPSRC) assumes this role.
 - *Research and Information Management*: Professor Douglas Kell (BBSRC) develops this new champion role from January 2009.
 - *Research Careers and Higher Education policy issues*: Professor Ian Diamond (ESRC) assumes this role from January 2009.
 - *Science and Innovation Campus Development*: Professor Keith Mason (STFC) continues in this role.
 - *Science in Society*: Professor Alan Thorpe (NERC) continues in this role.
- Establishment of the new Research Councils European Union Group to enhance further development of strategy and policy on the European Union.

- Establishment of the new Communications Strategy Advisory Group comprising the Heads of Communications across RCUK.
- Merger of the former RCUK Secretariat, Research Careers and Diversity Unit and Science in Society Unit to form the RCUK Strategy Unit.

4. **PROGRESS TO DATE AGAINST TARGETS AND MILESTONES**

RCUK successfully achieved the majority of its objectives and milestones proposed for 2008/09.

Progress, including the main highlights and achievements, are described below using the same format as in the RCUK Delivery Plan.

4.1 **Support for Multidisciplinary Research, cross-Council Research Programmes and Large Facilities**

Promoting the Sustainability of the UK Research Base

RCUK has provided an annual report to the UK Research Base Funders' Forum on the health of disciplines and a report looking at the current situation regarding research staff in the UK (Researchers: What is the situation?). The reports investigate and report on the "supply chain" of researchers across the different disciplines, to enunciate overall research requirements and inform research workforce strategy and management within the UK.

In 2009, the two reports are to be combined into a single report that concentrates on the flow from undergraduates to professors and senior researchers across different disciplines. Future reports can expand on this to cover, in more detail, how this UK-based academic flow interacts with private sector industry and with overseas students and researchers.

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 aim of the substantially revised protocol was to provide clearer guidance to applicants and to create new co-funding arrangements amongst Councils eliminating double jeopardy. A review in 2009 confirmed the health of these important arrangements and the Councils will continue to capture evidence to support their on-going operation.

Portfolio of Multidisciplinary Research

In 2008 the Research Councils maintained and invested further in six cross-Council priority research themes:

- Energy
- Living with Environmental Change

- Global Uncertainties: Security for all in a Changing World
- Ageing: Life-Long Health and Wellbeing
- Digital Economy
- Nanotechnology through engineering to application

Achievements over the last year may be found in individual Council Delivery Plan Scorecards, with the themes working together to produce plans for their evaluation, communications, knowledge exchange, skills, public engagement and international working over the CSR period.

In the future, the current priority themes will provide a framework through which the Research Councils can mobilise research to address our ever changing societal challenges. RCUK has recently identified three further challenges to which it believes the UK research base is well placed to respond. The following three emerging challenges are now being developed:

- Food Security
- Connected Communities
- Fostering Recovery and Enhancing Resilience

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 and the new priority themes remains a fundamental area where RCUK adds value. A workshop to maximise the opportunities for cross-theme working was held in December 2008. The event focused on developing and sharing opportunities for joint working, defining their vision and strategies beyond the CSR and sharing best practice to ensure effective engagement with external stakeholders. The themes gave their first annual presentation to Adrian Smith in December 2008 and also attended meetings with the Research and Development Group over the course of the year. In March 2009 the Research and Development Group also considered annual reports from each of priority themes. Each theme has also worked with a nominated Chief Executive Champion to ensure effective progress against their deliverables.

Large Facilities and Infrastructure Activities

The 2008 *Large Facilities Roadmap* was published in July 2008 and following the publication, a review of the process for both the Roadmap and the Capital Fund prioritisation exercise was conducted. A number of recommendations were agreed with DIUS and will be applied to the next round. The Research Councils also reviewed and updated the criteria for eligibility to enter the prioritisation process to improve the clarity of the criteria and take into account the change agreed in response to the RCUK International Review of Physics.

4.2 International Collaboration

Following the launch of the RCUK Office in India in October 2008, joint governance arrangements for the three overseas offices have been introduced, allowing more focused strategic engagement and to ensure Office objectives contribute to the implementation of the RCUK International Strategy. A separate steering committee

remains for UKRO, to ensure input to UKRO strategy and governance from subscribers.

RCUK has also formed the new Research Councils Europe Group (RCEU) to facilitate strategic engagement at the European level. The aim of the group is to raise the Research Councils' profile in the EU and have more influence on the European Agenda.

RCUK is taking forward the implementation of the RCUK International Strategy via a small number of focused task groups. The first group has started work in communications, including developing the extranet facility and the RCUK International web pages. Data gathering and metrics is the focus of another group and review of networking and collaborative schemes is also in progress.

RCUK works to co-ordinate activities of a cross-Council nature and these include the six cross-Council multidisciplinary research themes. The theme leads have been asked to produce international plans and should be valuable in leveraging additional funding from overseas on issues of common interest where there can be benefit in working together.

The RCUK Strategy Unit worked with EPSRC, the Science Bridges Working Group and the overseas offices to deliver the second Science Bridges awards. Ten awards were agreed in all, four with China and three each with India and the US. £12 million of funding was made available, with £4 million for each country. In addition the Department of Science and Technology in India match funded all the UK/India proposals and worked collaboratively with RCUK to review the proposals in a single peer review process, avoiding double jeopardy.

RCUK is supporting increased strategic engagement with other UK stakeholders in international collaboration to improve the coherence and effectiveness of the UK international effort. A stakeholder meeting took place in November 2008, to consider the Vision for UK International engagement, the new International Science and Innovation Unit in DIUS and the measurement of international collaboration.

RCUK interactions with the Science and Innovation Network have increased (particularly now it has moved to DIUS). This includes a more interactive relationship with regular meetings and the opportunity to feed in to the SIN business plans in a more structured way.

4.3 Research Careers and Diversity

The Concordat to Support the Career Development of Researchers

The *Concordat to Support the Career Development of Researchers* was formally launched by the Minister in June 2008. The event was attended by all the signatories and supporters. The *Concordat* has been widely distributed (nearly 70,000 copies) and the initial overview of the implementation has been taken forward. A Research Concordat Strategy Group had its initial meeting in January and the Terms of Reference, the benchmarking process and an initial implementation plan have been agreed.

The Research Councils and the Funding Bodies have agreed funding for a coordinator and appropriate support to take forward the benchmarking and implementation at a sector level. Implementation will also need to be taken forward at an organisational level by the signatories and supporters. Universities and sector organisations have held a number of events to promote the *Concordat* and are developing plans for implementation.

Vitae

Vitae, a new initiative to champion the professional and career development of both doctoral researchers and research staff in higher education institutions and research institutes was also launched with the *Concordat* on 25 June 2008. The new organisation will play a major role in working with institutions and researchers to implement the *Concordat*. Funded by RCUK and managed by CRAC: The Career Development Organisation, Vitae builds on previous work by the UK GRAD Programme and UKHERD (UK Higher Education Researcher Development) to build capacity in the HE sector to support researchers.

Vitae has built the programme with a broader remit to include research staff as well as research students, have continued to influence policy, developed and launched new training programmes for institutions and launched a major new website (www.vitae.ac.uk). Vitae has also enabled researchers to be more confident in their employability and career options and built evidence of the range, impact and perceptions of researchers' careers.

Developing the Evidence base for Policy Decisions

The Researcher Development Impact and Evaluation Group (previously known as the Rugby Team) is a sector-led working group, drawn from a cross-section of HEIs and other relevant stakeholders, with a mission to '*propose meaningful and workable ways of evaluating the effectiveness of skills development in early career researchers*'. A finalised publication *The Rugby Team Impact Framework* (RTIF) was presented at the National Vitae Conference in September 2008; it is an evaluation model for training and development activity specifically tailored to the context of training and development of researchers in higher education. .

A cohort study to provide high quality evidence on the economic impact of PhDs

RCDG commissioned a team of researchers from the Institute for Employment Research at the University of Warwick to conduct an analysis of the options for collecting data on the early careers of PhD and research degree graduates. They produced a report in April 2008 which recommended gathering initial, statistical information through an enhancement of the Higher Education Statistics Agency survey of the destinations of leavers of higher education which asks graduates about their careers and choices roughly 3.5 years after graduation (known as the L DLHE).

UK International Fellowship Association: An Alumni Scheme for Overseas Recipients of RC Fellowships

The UKIFA Project Team need to agree on the final details of the Fellows survey to establish the Fellows' likely requirements. The specifications for the UKIFA website

are being discussed with the information services directorate and discussions will take place with EPSRC about the possibility of having a shared IT platform for both UKIFA and the Dorothy Hodgkins Postgraduate Awards Network. Following market research, the UKIFA membership will be built up, the UKIFA website/network will be developed and the possibility has been raised for a UKIFA launch event which will facilitate networking between members.

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

During the year RCUK has risen to the challenges set by Worry and delivered an integrated set of activities aimed at increasing the economic impact of the Research Councils.

Understanding and Demonstrating Economic Impact

RCUK have commissioned a number of projects that aim to understand better the causes and processes that generate successful economic impact in order to inform strategy and decision making and maximise future impact.

- RCUK Placement Fellowship – Under the ESRC’s Placement Fellowship Scheme RCUK has appointed a research economist on a six-month placement to offer expert advice on economic impact assessment within the Research Councils.
- Origin of Spinouts (UNICO) – this project is underway and will provide valuable insight into the role of the Research Councils in the formation of university spinouts.
- Demonstrating and Enhancing the Impact of Research (CIHE) – this important project is underway to understand how companies involved in research collaborations secure benefit, drawing upon case studies provided by RCUK and TSB.
- Economic Impact of the PhD – this study is underway to improve the long term understanding of research career trajectories and provide high quality evidence of the economic impact of PhDs.
- Outputs and Outcomes Project – is investigating approaches to capture output and impact evidence from Research Council investments during and beyond the period of funding. This information will be key to strengthening the evidence base for strategy development and crucial in demonstrating the benefits of The Research Councils’ work to society and the economy.

RCUK has utilised its overseas offices to maintain awareness of international approaches to economic impact assessment. This and a recent UNICO report co-funded by RCUK and others highlights the UK’s leading role in economic impact assessment.

Embedding Users’ Views in Policy, Strategy and Delivery

RCUK recognises that users have a significant role in realising impact and have taken steps to enhance their contribution into decision making processes.

- Impact in Peer Review – on a staged basis from February 2009 the Research Councils have agreed the introduction of impact plans to ensure that applicants maximise potential opportunities for impact. Guidance to peer reviewers has also been revised to ensure that the peer review process maximises both excellence and impact.
- User Motivations Project – RCUK have initiated a project to hold ten focus groups in order to understand the motivations, incentives, expectations and experiences of non-academic peer reviewers. This will help the Research Councils to ensure that the user perspective is strongly represented in funding decisions.
- User Satisfaction Survey – initial planning is underway for the follow-up to the 2007 User Satisfaction Survey. The survey will review the user community's level of satisfaction with the work of the Research Councils.

Investing in a Progressive Knowledge Transfer Portfolio

The exchange of ideas and access to knowledge is crucial to maximise economic impact. RCUK has taken the following steps to support this process:

- KT Harmonisation and Branding Project – phase one has been effectively completed. The project has introduced common branding and alignment across Research Council KT schemes such as Follow-on Funding, Collaborative PhD studentships and People Exchange.
- RCUK Knowledge Transfer Portal – this was introduced in February 2009 to improve the accessibility for users to access funding opportunities in KT.
- RCUK Knowledge Transfer Consultation – this was launched in February 2009 and aims to gather feedback from our KT stakeholders to contribute to the continued improvement of RCUK support for KT. As part of this agenda RCUK and UNICO held a joint workshop in January 2009 with the aim of bringing KT Directors together to discuss topical issues.
- Intellectual Property Rights (IPR) – RCUK have reviewed and updated their requirements for IPR management and exploitation including the introduction of a new research grant condition for IPR exploitation and impact. This has been commended in the *Wellings Report on IP and Research Benefits*.
- Business Plan Competition - RCUK announced the winners of the 2008/09 round of the Business Plan Competition, which offers researchers training and competition to develop business plans for commercially viable ideas. Planning for the 2009/10 of the competition is underway, as is the evaluation of the schemes operation and impact.
- Proof of Concept Funding – An RCUK-TSB-UNICO workshop was held in January 2009 to consider support for pre-investment proof of concept support in the UK.

Fostering an Enterprise Culture

The Research Councils are committed to engendering a culture in which knowledge transfer activities are encouraged, valued and rewarded.

- RCUK Award for Serendipity – RCUK, in partnership with Times Higher Education has created the Serendipity Award in the THE Annual Awards. This award will recognise entrepreneurial spirit in universities and reward researchers who have seen and seized unexpected opportunities arising from research, which have created significant positive impacts on society and the economy.
- UNICO Impact Awards - RCUK has agreed to sponsor the public policy and public services award at the UNICO 2009 conference.
- System level influences - RCUK has been engaging with HEFCE to discuss how economic impact is recognised and rewarded in the REF. RCUK is also scoping a project with UUK which aims to investigate the policies, practice and perceptions of academic recruitment and promotion, in particular the extent to which these reflect impact considerations.

Partnership with the Technology Strategy Board (TSB)

Testament to the good and productive working relationships established with the TSB, the joint TSB-RCUK Transition Group formed in July 2007 has evolved into the RCUK-TSB Strategic Partnerships Group. The Group continues to meet regularly and explore and establish new collaborative activities, which promote new ways of working together, including multi-Council participation, new programme areas and new mechanisms. The Research Councils have a strong portfolio of complementary and collaborative activity with the TSB and are on target to collectively meet the £120 million investment target with the TSB.

Engagement with Stakeholder Organisations

RCUK has made efforts to strengthen relationships with key opinion formers and stakeholder organisations such as CBI, CIHE Russell Group, Funding Councils, UUK, UNICO, RDAs and others. This engagement has led to the development of a number of new projects in partnership as well as discussion and coordination on matters of common interest. In addition to the activities documented above, interactions include RCUK membership of the HEFCW Research, Innovation and Engagement Committee as well as representation on the RDA RIST and ICARG Groups.

4.5 Science in Society

Schools policy development

SiS team has shifted the focus of the RCUK schools programme away from being solely concerned with providing an important resource for schools and more toward providing resources and development opportunities for researchers. SiS team is currently developing frameworks specifically for researchers working with schools, which will make more transparent the specific skills development taking place for the researcher involved. This is intended to provide a clearer framework for use by all researchers, but also to give guidance to learning and development officers in HEIs to enable them to understand better the benefits to the researcher of public engagement with schools. This both supports the embedding of public engagement in the HE

sector (by making explicit the links with skills development) and complements the work of the RCUK Research Careers and Diversity team.

SiS Advisory Panel

A SiS Advisory Panel was established in 2008 to provide additional advice to the implementation of SiS Group's strategy. Panel members have acted as champions for RCUK Public Engagement activities in their wider communities. The SiS Advisory Panel has also provided advice and inspiration throughout 2008/09 for specific developments within the SiS strategy, such as:

- public engagement for 2012 Olympics;
- schools policy;
- demonstrating the benefits of public engagement.

Embedding public engagement within Research Council policy and processes

In 2008/09 RCUK SiS team worked together with the Knowledge Transfer and Economic Impact Group to draft a joint 'Statement of Expectation' regarding public engagement for our research community. In January 2008 RCUK Research and Development Group also agreed to accept a statement of intent regarding embedding public involvement in Research Council activity. All cross-Council priority themes have also outlined in their programme objectives that public engagement be included in the theme plans and reported against in annual reports. Following this, the RCUK SiS team has met with all theme leaders to discuss a number of ongoing opportunities to ensure that public engagement adds benefit and impact to programme plans.

ESRC Research Syntheses

RCUK SiS team has become actively involved with this ESRC programme of small awards and is represented on the steering group. The purpose of the syntheses is to draw together what is already known from both published and current research and to highlight what further research questions remain within the chosen topic for review. The topics cover any area relevant to the work of either RCUK SiS team or RCUK RCD team.

4.6 Increasing the Collective Policy Influence and Visibility of the Research Councils

The RCUK external relations programme for 2008/09 focused on supporting collective initiatives to and multidisciplinary activities across Research Councils, providing greater emphasis on their international activities and showcasing activities in Knowledge Transfer and Economic Impact.

The publication *A Winning Blend*, which showcases Research Councils' multidisciplinary activities, was launched at the DIUS Science Campaign event attended by the Prime Minister, Science Minister Lord Drayson and other high-profile delegates. *A Winning Blend: how different perspectives shape solutions* focused on the highly successful outcomes of flagship multidisciplinary programmes supported since the 1998 Comprehensive Spending Review and the current six cross-Council priority theme areas.

The RCUK Strategy Unit has provided communications support for the launch of the overseas office in India, including leaflets, website and information packs and continues to offer communications support to all overseas offices. It also led on coordinating the press for the announcement of the Science Bridges awards across the India, China and US offices and in collaboration with DIUS.

The RCUK website has gained immeasurably this year from the introduction of the Knowledge Transfer Portal, which brings together all Research Council knowledge transfer schemes and activities in one place. User statistics show that in the week following the official launch of the portal, visitor numbers quadrupled.

RCUK sponsorship of conferences and events, including the RCUK Business Plan Competition in October 2008, the UNICO conferences in June and November 2008 and the Yorkshire Forward Innovator/09 Knowledge Exploitation Award, has continued to raise the profile of RCUK activity in a number of areas, but particularly that of Knowledge Transfer and Economic Impact.

RCUK briefing material made available to DIUS in relation to Research Councils' activities and successes has continued in a similar form to last year. This includes a fortnightly digest of Research Council news output, with an emphasis in the outputs from investments and a regular Forward Look to alert DIUS to future activities and announcements. The RCUK Strategy Unit has liaised successfully with DIUS press office to update the format of Forward Look to make it more user-friendly for Lord Drayson's office.

RCUK Strategy Unit acts as the secretariat for the Communications Strategy Advisory Group, comprising Research Councils Heads of Communications, which had its initial meeting in January 2009. The group will focus on cross-Council external and internal communication and has already developed an External Communications Strategy and Implementation Plan and an Internal Communications Draft Strategy

4.7 Efficiency and Effectiveness of Research Council Operations

Full Economic Costing (FEC)

The FEC Review reported in April 2009 (<http://www.rcuk.ac.uk/review/fec/>). It received a large number of submissions from HEIs, Government departments, charities and businesses. The most consistent improvement reported was a cultural one: TRAC methodology has provided a much needed framework for HEIs to calculate their indirect costs in a transparent manner, which is broadly understood by sponsors and which allows both administrative and academic staff to appreciate the true cost of research. Concerns remain that the TRAC methodology may have become over-complicated however and both RCUK and the TRAC Development Group are working towards simplification and consistency.

A marked improvement is apparent over the current decade in the Trigger Metrics used to measure HEI financial and physical sustainability; however data from the annual Transparency Review continues to show that HEI research makes a large deficit. Total research income in 07/08 was £6.44 billion while TRAC adjusted costs

were £8.45 billion (76.2% recovery)¹. With the current economic downturn it is increasingly important for HEIs to monitor the percentage return of Full Economic Cost which they obtain from each funding sector and to embed these metrics (including Trigger Metrics, Capital Infrastructure Framework Metrics and the Committee of University Chairs Key Performance Indicators) in their governance structures and Sustainability Frameworks. The Government, too, needs to more consistently make use of sustainability metrics in annual reporting on implementation of the Science and Innovation Investment Framework. The working group developing metrics to monitor compliance with the recently published *Concordat to Support the Career Development of Researchers* is recommended to develop generic metrics to monitor 'staff sustainability'. 'Intellectual sustainability' metrics will be developed by the REF.

The RCUK Quality Assurance and Validation Project

The RCUK Quality Assurance and Validation project reported in April 2009 (<http://www.rcuk.ac.uk/cmsweb/downloads/rcuk/documents/qavreport.pdf>). It aimed to gain assurance on the implementation of TRAC in HEIs and to validate the rates used on Research Council applications. Fifty HEIs were visited during 2008, with each visit taking three days and detailed reports being produced for the Institution. Implementation of TRAC rules appears to have been satisfactory, with an average of eleven recommendations for improvement made per HEI. There was no evidence that Institutions were consistently overcharging, although three institutions were placed 'in sanctions'. Issues identified resulted in adjustments to HEIs' rates of up to 20% in Indirect Rates and 100% of Estates Rates. A significant issue identified was the variation between institutions in terms of support for TRAC Managers by senior institutional managers. In about half of the institutions visited support was limited. There was concern that some institutions saw TRAC purely as a way of ticking boxes, with no use for internal monitoring/decision making. There is therefore scope for senior management to be more engaged with and supportive of front-line TRAC staff.

Outputs & Outcomes Collection Project

Phase 1 of the project focused on delivering changes to the final grant reporting process across Research Councils and these changes have now been implemented. It is estimated that the changes will result in savings of £17.1 million over the current CSR period, against a £16.5 million target (50% of the scientific community and Research Council effort used to fill in and peer review final grant reports).

Phase 2 outlines the business case to agree a harmonised approach for gathering quantitative and qualitative evidence of the outputs and longer term outcomes and impact of Research Council investments. This data is key to enabling Councils to strengthen their evidence base for strategy development, crucial in demonstrating the benefits of Research Council work to society and the economy and will support evaluation work required by Research Councils to demonstrate a step change from their published Economic Impact (EI) baselines. It is expected that the business case will be presented to the RCUK Operational Strategy Group in July 2009, where a

¹ Methodological issues may remain here however in academic's records for 'research time' and in the calculation of 'return for finance and investment' and 'infrastructure adjustment'.

decision will be made whether to proceed with a full implementation of the recommended actions.

Communications and Relationships Project

The Communications and Relationships Project (CR) was commissioned in response to the efficiency and effectiveness of peer review project's consultation with the research community. One of the main recommendations of RCUK, in response to this consultation, was to improve relationships and communications with the research community concerning the peer review processes and of relative performance levels.

In March 2008 the cross-Council CR project team was assembled in order to seek ways of improving communications and relationships with the research community with a view to improving quality in peer review. Specifically, dissemination of best practice across research organisations and the publication of success rate data were seen as priorities.

The projected outcomes of, and benefits arising from, this project are:

- increased cross-Council awareness of practices employed by individual Research Councils to communicate with Research Organisations;
- a central resource for the dissemination of cross-Council guidance and information relating to well managed pre-submission processes and their potential to have a positive impact on success rates;
- revision and update of existing RCUK success rate related webpages;
- harmonised provision and management of success rate and grant funding overview information and data via RCUK centrally linked 'hubs';
- collaboration and support of other projects working on related issues;
- identification of ARMA as a focal point for dissemination of examples of best practice.

Upon completion of the above actions the CR Project will close.

RCUK VfM Efficiency Delivery Project

SR04 – A record of delivery

Under the RCUK banner, the Research Councils collectively over achieved against their share of the Gershon efficiency targets by £146 million, delivering a total of £492 million of savings. These savings were realised through four savings categories (i.e. administration expenditure, growing the co-funding of research, increasing the efficiency of Research Council Institutes and the reprioritisation of funding targeting new and emerging opportunities) and across a range of specific initiatives therein.

CSR 07 – a challenging programme of VFM reforms

Science Research Councils Vfm Efficiency Programme builds on the previous Gershon project and seeks to maximise the efficiency of research activities funded by Research Councils by delivering savings of £593 million in this CSR period.

The RCUK annual targets are: £81 million (in 2008/09), £162 million (in 2009/10) and £349² million (in 2010/11). These savings were realised through the same four categories (as outlined above) but with a different mix of specific activities.

To date in 2008/09 the RCUK has delivered savings of £118 million.

Shared Services Centre (SSC)

2008/9 saw the first implementation of shared services to the Research Councils from the RCUK Shared Services Centre Ltd. Significant milestones included:

- the TUPE transfer of 400 staff from the Research Councils to RCUK SSC Ltd in April 2008;
- the take on of Procurement services by the SSC in May 2008;
- the take on of ITC services for the Swindon site by the SSC in June 2008;
- the launch of HR services to 2 of the Research Councils and the SSC based on the Oracle platform in February 2009;
- confirmation of the solution for the management of grant applications and funding;
- the winning of the bid in March 2009 to provide DIUS with shared services for Finance; HR and Procurement by March 2010. (Note this may need to be revisited in the light of DIUS being merged into BIS.)

Further rollout of HR, Payroll, Finance and system-related Procurement services across the Research Councils and to DIUS are planned in 2009/10; along with the development and implementation of the grants solution.

² This figure was originally £243 million but was increased to £349 million (i.e. by £106 million) as a consequence of the 2009 Budget. The new target of £593 million over three years is a significant increase and thus presents a substantial challenge to the Research Councils. However, we are confident we can make this revised / increased contribution.

RCUK OVERSEAS OFFICES: BUILDING RELATIONSHIPS IN THE USA, CHINA AND INDIA

1. THE RCUK OFFICE IN THE US

Strategic Issues

- The RCUK Office in the US was opened in November 2007. It is hosted by the British Embassy in Washington DC and works closely with the FCO/DIUS US Science and Innovation Network, British Council and UKTI. The office has the following aims:
 - encourage collaboration between the best researchers in the UK and the US;
 - promote movement of researchers between the UK and US;
 - promote the sharing of access to data, facilities and resources between the UK and the US;
 - influence the international research agenda;
 - promote the UK as a world centre for research and innovation;
 - operate in an effective and efficient manner.
- The office has provided a number of reports and policy papers to Research Council individuals on: private foundation funding and the opportunities to develop collaborations with US philanthropic funders; UK-US postgraduate and researcher mobility, current funding sources and developed proposals for future opportunities for RCUK RCDU; developed proposals for a US alumni scheme; US funding policy for RCUK FEC project; summary of NIH peer review project; US economic impact methodologies for KTEIG; and US academic physics research to the UK Wakeham Review of physics. In addition, the RCUK US Office provides research councils with a monthly update on US R&D activities and policy developments.
- The office has provided a range of analysis to Research Councils on: US R&D funding trends and priorities to inform RC Spending Review discussions; provided input to UKRO on EU strategy on international S&T cooperation and to Commission review of EU-US research collaboration; US funding and research groups working on climate change adaptation and climate change and health; leading NSF funded universities; sub-contracting arrangements of US funders and liability issues; and leading US science and technology parks.
- The office has provided input to UK Government on a number of inquiries including: the House of Lords inquiry into genomic medicine; analysis of US support of transformative research for Her Majesty's Treasury; and analysed UK-US university collaboration and future opportunities for the Prime Minister's Sexton-Trainor Working Group.

Main Highlights

- Developed more effective working relationship with US SIN including: alignment of business planning; SIN input to assessment of outline US Science Bridge proposals and leverage of £24k from SIN to support development of short listed proposals. Also secured funding to run UK-US workshops in: Healthy Ageing; TRACES; Environmental Impacts of Nanotechnology; Healthcare in the Digital Economy; Alzheimer's; Stanford Linear Accelerator Center and Anomaly Detection (under RCUK Global Uncertainties programme).
- Developed closer working relationships with US federal funding agencies to understand and reduce barriers to UK-US collaboration. Including support to Research Councils in development of joint activity with US funding agencies, for example, support for the NSF-EPSRC sandpit on synthetic biology; discussions with the Department of Energy on Nuclear Engineering; supported BBSRC and ESRC in development of joint calls with NIH in the Biology of Ageing and Health Disparities respectively; facilitated discussions with Mars plc and NIH on Research Council involvement in Human-Animal Interaction research; visited NASA Goddard and NASA Ames to promote and discuss STFC collaborations; provided input for the review of the Library of Congress Scholarship scheme.
- Initiated development of a UKTI led US business mission to Harwell Science and Innovation Campus.
- Visited a number of US centres to promote the UK and Research Councils as a partner of choice. These include Stanford Linear Accelerator Center and Lawrence Livermore National Lab to promote and discuss STFC collaborations ; meetings with NOAA, EPA and USGS to raise awareness of NERC priorities and capabilities; provided support for NERC, EA and DEFRA joint call on environmental nanotech; visited Huntington Library to discuss new collaborative initiative; promoted LWEC programme on visits to Scripps, Global Institute of Sustainability at Arizona State and Environmental Health Sciences at UCLA; promoted Digital Economy programme to CITRIS, Google and HP; re-invigorated discussions between NCAS and NCAR leading to MoU; also visited MIT Media Center and CA Nanosystems Institute.
- Represented Research Councils and UK research base at various events, seminars and workshops including AAAS conferences; DFG-NSF conference on social economics; supported AHRC-NEH "Picturing America" conference; fed research council views into federal research initiative on Science of Science Policy; and briefed Congressional S&T Committee staff on UK university KT. Gave a number of presentations including: MRC/BBSRC/Wellcome Trust policy on dual use research at NIH/WHO biosecurity conference; UK mathematics research to the American Mathematical Society event; UK support for early career researchers at the Council for Graduate Schools conference.

2. THE RCUK OFFICE IN CHINA

Strategic Issues

Our main strategic activities during this first full year of operation focused on:

- a) Building solid relationships with key agencies in China:
 - We have become a trusted partner of the Ministry of Science and Technology, as evidenced by inclusion for the first time of specific UK priorities in MOST's 2009 call for international collaboration projects;
 - We have begun to explore with the Chinese Academy of Sciences how to develop a solid strategy for building up links, as both sides recognise that current collaborations are well below the potential for mutually beneficial activity;
 - We have provided the Chinese Academy of Social Sciences with substantial help and advice on planning for a new Centre on Economic Simulation, including providing contacts for a 3-nation study tour by CASS officers;
 - We have promoted the pioneering joint call between EPSRC and National Science Foundation of China as paving the way for "gold standard" collaborations based on unified joint proposals and single decision process;
 - We have worked closely with the FCO-SIN, DfID and Defra posts in developing business plans and scoping potential for RCUK activity around sustainable agriculture, food security, adaptation to climate change and science policy;

- b) Scoping strategies for RCUK in China:
 - Discussions arising from visit to China by the Government's Chief Scientific Adviser, Professor Beddington, in late March stressed the need to develop a national strategy to support UK-China research collaborations;
 - We proposed a new framework of collaboration agreements between UK and China, specifying how future activities can mobilise resources in both countries. A visit to London by the senior MOST Vice-minister provided an early opportunity to act and RCUK's first international agreement was signed on 17 November 2008. Our initiative was warmly welcomed by MOST.

- c) Reducing cross-cultural impediments to UK-China collaboration:
 - Our consultancy project on Cross-cultural Issues in UK-China Research Collaboration got under way in November. The product will be launched in print and on the web in autumn 2009.
 - Preparation is underway to expand the China Office web pages to include more information about China's science system and research funding processes. Our website has been praised by Chinese researchers as providing information which cannot easily be found elsewhere in China.

Main Highlights

The China Office programme budget, set initially at £440k in a full year, supports activities which have good potential to promote RCUK's mission in China and add value to funding from other sources. Priority is given to activities which contribute to a strategic purpose, rather than ad hoc one-off events.

During the year we supported nine Summer Schools and 12 workshops, one internship to the Office and two visits by Chinese support agency staff to the Research Councils. We met numerous visitors for briefings and debriefings, including some members of RCUK Councils and Boards.

- **Summer School Competition:** This scheme alerts younger UK researchers to the potential benefits of engaging with China.
- **Scientific Workshops:** Topics are selected in consultation with Research Councils on the basis that they offer good prospects of long-term UK-China research collaboration and follow-on funding. Two workshops were reported in the mainstream Chinese media.

These activities provided opportunities for presenting RCUK China's mission to varied audiences around China, both at the events themselves and at meetings with regional research institutions and science administrations. Some topics offer potential for trilateral UK-China-India development. We keep in close contact with the RCUK Office in India.

- **Internships:** We wish to encourage Research Council programme officers to visit China and see for themselves the speed and scale of developments in the research base. This year we supported a visit from a member of MRC staff to the China Office and two visits by Chinese agency staff to the UK to learn more about peer review and evaluation processes.
- **GCSA visit:** The RCUK China contribution to the programme was a Round Table on LWEC and China. This alerted key figures in the UK to potential for leveraging impact in China and explained to key agencies in China how the multi-partner LWEC initiative works and how policy-oriented research agendas might be aligned. The Round Table fully achieved expectations and follow-up work is a priority for 2009.

2. THE RCUK OFFICE IN INDIA

In June 2008, the Director and Interim Deputy Director arrived in India to a bare office in the British High Commission in Delhi to initiate the set up of the office including arranging IT and financial systems. The locally engaged Office and Communications Manager and the Deputy Director for the Office commenced work in October 2008.

The office formally launched – to a challenging timetable – in late October 2008. Feedback from the launch has been universally positive including that from UK and Indian media. 92 UK based attendees, the largest UK delegation to visit India in

recent years, were joined by over 100 Indian delegates, as well as UK stakeholders based in India. Three days of launch-related events were organised, followed by tailored visit programmes for many of the UK delegates. Delegates/speakers included: Professor John Beddington, Government Chief Scientific Advisor; Dr T Ramasami, Secretary to the Government of India, Department of Science and Technology (DST); Lord Kumar Bhattacharyya, founder of Warwick Manufacturing Group; Dr Mashelkar, President of the Global Research Alliance; two Research Council chief executives. The launch and associated publicity, helped to physically demonstrate the huge potential of collaborations between the UK and India.

A three year Delivery Plan for the Office was finalised in late 2008. Strategically, the office has decided to focus efforts on priorities that are particularly relevant for UK/India collaboration. In discussion with Research Councils, cross-Council theme leads and Indian stakeholders (particularly SIN-India) the following research priorities have been identified:

- Energy – solar and nuclear. £5 million of UK funding for UK-India Solar Energy initiative has been agreed and the Office has negotiated joint funding from India counterparts in DST;
- Global Uncertainties – food security and security technologies. Negotiations with DST initiated to carry out a joint UK-India roadmap for security technologies;
- Health – non-communicable diseases. Initial discussions with MRC on Global Health Alliance and global high profile meeting planned for 09/10;
- Digital Economy – Digital Technology for Development. Joint peer review negotiated for large scale award in Next Generation Networks and further activities initiated with EPSRC for joint scoping activity for 09/10.

A key element of the office's strategy is a research mapping exercise and a plan to look at where India's key research strengths lie was presented to the Research Councils' International Group (RCIG) in December 2008 following wide ranging discussions with stakeholders in India and the UK. Major activity will commence in 08/09.

Highlights (*note: majority achieved in six months following the office launch*).

1. Negotiated joint funding and peer review to avoid double jeopardy.
 - In collaboration with Digital Economy lead, the office negotiated with the Department of Science and Technology (DST) joint UK/India peer review (with no double jeopardy) for UK/ India academic/industry joint proposal in Next Generation Networks; £9 million proposal (includes £5 million jointly from EPSRC and DST) successfully peer reviewed in December 2008 and grant announced. The office provided strong input into associated press releases in January 2009.
 - On behalf of EPSRC, the office negotiated joint peer review with the Department of Science and Technology to ensure no double jeopardy for the reviewing of jointly funded Science Bridges Proposals; Joint UK/India funding of successful Science Bridges announced in Jan 2009.
2. Establishment of the '*India Research Network*' (IRN): The RCUK Office in India and SIN-India, led on the establishment of the IRN which aims to ensure

joint working, maximising potential and minimising overlap. IRN Partners are: RCUK Office in India, SIN-India, British Council, UK Trade and Investment (UKTI), Department for International Development (DFID) and the Climate Change and Energy Unit. Bi-monthly meetings have been established; a research strategy of shared priorities has been developed.

3. Stakeholder mapping exercise to prioritise stakeholders, visits and events attendance. Meetings/ visits undertaken include:
 - Indian: Met and discussed opportunities for joint working with key research funders including: DST, Indian Council of Social Sciences Research (ICSSR), Department of Biotechnology (DBT), Ministry of New and Renewable Energy (MNRE), Council of Scientific Industrial Research and University Grants Commission; private sector: Infosys, NASSCOM, BT India, HP labs and Wipro; visits to nine Indian Universities/institutes;
 - Other funders and organisations in India: NESTA, Wellcome, EU partners, Canadian High Commission; DFG, Canadian Science Attache, Indo-US Science and Technology Forum.
 - UK: meetings with all Research Councils individually; all cross-Council theme leads; RCUK Strategy Unit; all three National Academies, academic institutions/universities and private sector contacts both in the UK and when visiting India.
4. Targeted attendance / activities around a series of events including:
 - ESRC – ICSSR workshop on Restructuring, Higher Education and the Labour Market and Social Inequalities: facilitated invite process and interaction with Indian collaborators; managed publicity relating to funding opportunities;
 - India-SIM (Security, Identity and Management conference) 2009: director gave inaugural address;
 - Global Environmental Change and Food Systems (GECAFS) policy seminar: pinpointed policy makers for invites; aided speaker visa applications; arranged RC speaker; provided RCUK publicity including banners; drafted press release;
 - UK-INIT (Interactive Technologies for the End User) workshop: spoke to attendees on EPSRC funding opportunities and provided publicity;
 - Childhood Physical Activity and Body Composition Conference, Kerala (MRC ICMR);
 - ESRC –ICSSR Workshop Environmental Sustainability and Climate Change: managed publicity relating to funding opportunities;
 - Attendance at ISBA 2009 - International Conference on Business Incubation: accompanied and briefed senior UK delegation on research collaborations.
5. Building the profile of the RCUK Office in India
 - Website: designed and launched office web site including case studies, funding opportunities and latest news;
 - Communications: developed, designed and disseminated communication materials including RCUK Office in India brochure containing overview of Research Councils, priority themes and case studies; strong input to relevant press releases in UK and India.