



Annual Report

January 2009 – March 2010



Technology Strategy Board
Driving Innovation

NESTA



1. Introduction

The Scientific and Knowledge Transfer Programmes

- 1.1 Major advances are expected in: advancing knowledge of a broad definition of innovation through high quality, independent, research which is fully engaged (i.e. co-produced) with policy and practitioner communities; ensuring the maximum impact of new knowledge on policy and practice, reaching out to all potential sources of and audiences for new knowledge; developing capacity, in terms of people, data and methods, for future research and knowledge exchange on broader innovation.
- 1.2 In order to achieve the advances set out above, the Research Centre will be expected to carry out a programme of interdisciplinary research and make significant contributions in the areas of: New modes of innovation; Innovation in services; the links between innovation, human capital, intellectual capital and business performance.
- 1.3 The Research Centre will be expected to carry out a programme of engagement with policy and practice communities and make significant contributions in the areas of: developing a dynamic and novel forum for stakeholder engagement, knowledge transfer and networking, within the field of broader innovation, working closely with policy and practitioner communities; drawing together research and other kinds of knowledge, within the UK and internationally, to strengthen the evidence base for broader innovation policy and practice; collaboration with communities of research, policy and practice.

Distributed Research Projects

The Centre Director with the Hub Director will be responsible for ensuring that the Principal Investigators of the Distributed Projects have a full opportunity to work with the Knowledge Hub programme of the UK~IRC and that appropriate Knowledge Hub related activities can be co-developed.

2. Impact and Highlights

Highlights from the core research programme:

- The development of a new panel dataset on UK design consulting engineering industry. Working with Royal Institute of British Architects (RIBA) and publications *Architects Journal* and *New Civil Engineer*, this dataset draws together information to map the evolution of this fast growing and important sector of the UK economy. The first paper arising from this new database has been accepted for presentation at the Academy of Management Conference.
- The development of a new survey instrument and survey sampling frame to capture the extent and type of Open Innovation practices among UK firms. We furthered knowledge on Open Innovation by publishing a practitioner-oriented paper on OI and intellectual property in the *MIT Sloan Management Review*.
- A comprehensive analysis of the future evolution of the UK economy, capturing inter-industry dynamics in export and imports and their contribution to the UK's balance of payments was published as a working paper and accepted for publication in *Civitas*.
- New and path-breaking analysis of the economic contribution of UK intangibles and research funding to economic development, contributing to the development of the NESTA Innovation Index. This research demonstrated that investments in R&D account for only a small share (9%) of total

investments in knowledge creation, opening a new window onto the sources of productivity in the modern economic system. Presentation of these results have been made at numerous government ministries as well as featured in the popular press, such as *The Economist* and *Financial Times*.

Knowledge Hub Highlights:

- The launch of three major reports on the relationship between universities, industry and the third sector, which draw on four new surveys of academics and industry and their attitudes to engagement and exchange. This research demonstrates the rich patterns of engagement that binds UK academics to other parts of society, including government, industry and the third sector, helping to challenge ideas that academics operate in 'ivory towers'. This work has been widely featured in the popular press, including *The Guardian*, *The Times*, *Financial Times*, *Research Fortnight*, *ESRC Today*, *BBC*, *The Australian*, *New Scientist*, *Times Higher Education* as well as leading to presentations to HM Treasury, Department of Business, Innovation and Skills, Research Council UK, AURIL, HEFCE, Cabinet Office, The Hauser Review, NESTA, OECD, International Alliance of Research Universities and a range of other policy forums. The research was cited in The Council for Science and technology report *A Vision for UK Research*, The Royal Society Report *The Scientific Century* and the 2009 BIS *Annual Innovation Report*.
- We launched a major new report on UK innovation policy, challenging the myths of government support for high technology ventures. We explored the development of high tech businesses in the Cambridge area and their growth through the use of soft business models, such as selling research contracts. This report featured in the *Financial Times*.
- Held first Innovation Summit co-funded with QinetiQ and EPSRC at Royal Society, London.
- Presentations and policy discussions held with senior government ministers (the Prime Minister, Lord Mandelson, Lord Myners, Lord Drayson) and senior officials (Director General Science and Research, Director of Research HEFCE, RCU, TSB, BIS) on Financing Innovation, Innovation Policy and the Future of the Research Base.

3. Progress against Objectives

Project 1: Open Innovation

Progress to date

During the 6 month period, Oct 2009- March 2010, the team has made significant progress in the following areas:

1. Joanne Zhang recruited as Research Associate.
2. Conducted a comprehensive literature review on open innovation, and compiled a list of practices, providing the basis for the survey instrument design.
3. Survey sampling frame has been agreed to cover manufacturing and business services, plus the energy sector (clean and conventional) will be UK based and cover independents and subsidiaries and (both national and international). The initial draft of the survey instrument has been refined using multiple rounds of input and feedback from all team members. Survey to be sent out in June 2010.
4. Contacts have been made with other leading researchers and research centres in the frontier of OI research, such as Henry Chesbrough at HAAS, UC Berkley; as well as practitioners such as hi-network.

5. Conferences and workshop planned: a) There will be a plenary OI session with invited speakers and a parallel OI theme within the DRUID 2010 Summer Conference in June; b) 1.5 day young researcher conference has been planned in Sept 2010 at Cambridge, in collaboration with the Service Innovation project.
6. The OI PhD studentship has been advertised, candidates interviewed and a student selected, to start in Oct 2010.

Project 2: Knowledge Intensive Business Services (KIBS) and Innovative Performance

Progress to-date

During the 6 month period, Oct 2009- March 2010, the team has made significant progress in the following areas:

1. Cher Li has been recruited as a Research Associate.
2. Research by Coutts and Rowthorn (published as a CBR working paper and forthcoming in *Civitas*) has analysed the UK's industrial structure, future balance of payments and trade performance and revealed the extent to which future output growth will require a significant improvement in manufacturing trade performance.
3. Background research has been undertaken on the development of the architecture, design and engineering consultancy sector in the UK. This has included the compilation of firm level panel datasets covering up to 30 years.
4. Relationships have been built and strengthened with the Design Council and with industry magazines *New Civil Engineer* and the *Architects Journal*. These help us to work closely with practitioners and gain an insiders' view of industry evolution.
5. A background paper has been written and a conference paper on the diversification of design consultancies has been accepted for presentation at the Academy of Management conference. The paper has also been submitted to the DRUID conference.
6. A plenary session on 'innovation in services' has been agreed for the DRUID conference in London in June 2010.

Knowledge Hub

Progress against objectives

The Hub is adopting an approach of systematic dialogue with key stakeholders to ensure strategic alignment so that activities have maximum external impact on policy and practice and that they inform the research agenda of the centre. The Hub has embarked on knowledge exchange including a wide range of research on innovation (including collaborating with other projects commissioned as part of the initiative) and has developed links and relationships with other national and international institutions concerned with innovation policy and practice, including BIS, NESTA, the Technology Strategy Board, the CBI, the Council for Science and Technology, the OECD, the EU, CIHE (Council for Industry and Higher Education), DIME (Dynamics of Institutions and Markets in Europe. In 2009-10 the Hub worked with communication specialists to develop web and corporate identity which has been applied across a range of media. It has also begun the compilation of a contacts database, has held six dissemination and research development events which were attended by over 350 delegates. The UK~IRC has through the Hub provided policy briefings and inputs into tailor made events for DCLG, BIS and TSB (in relation to innovation briefings, commentary on OECD innovation policy and impact evaluation respectively), sponsored the launch or publication of 3 major policy reports and developed on-line twitter and blog activity, posted 5 podcasts on the website linked to Hub events, and actively promoted media coverage of the UK~IRC research in a wide

range of published media. The UK~IRC also exhibited at the TSB Innovate '09. For fuller details see Section 4.b.

Changes in the programme

By building on existing research and responding to high levels of policy interest in it, UK~IRC researchers have through the Knowledge Hub made critical contributions to UK policy debates on the role of universities in the knowledge economy, the business model and methods of support required for technology ventures, and the level and impact of investment on intangibles in the UK economy.

The resources committed to this have meant that plans to conduct a short, scoping study on the use of evidence for innovation policy in our first year has been postponed to 2010-11 when Prof. Keith Smith, a Senior Research Fellow at Imperial and the Head of Innovation Analysis at BIS, will join the UK~IRC team (as a replacement for Professor John Bessant, who has left Imperial). Prof. Smith will work on this project in collaboration with the Directors over the next year.

4.

a. Investment Specific Indicators

In the first year of operation, UK~IRC associated researchers had 21 journal articles published or accepted for publication, provided 17 books and official research reports, 3 chapters in books, produced 38 working papers or other publications and gave 65 presentations at universities and policy and practitioner forums. UK~IRC associated researchers published in a broad range of leading journals, such as *Economic Journal*, *Journal of Technology Transfer*, *Political Quarterly*, *Regional Studies* and *MIT Sloan Management Review* in 2009 and early 2010. In addition, the Centre is playing an important role in supporting dialogue and exchange among leading thinkers on innovation through its support and hosting of the DRUID 2010 Summer Conference in London on 16-18 June, 2010. This will be the first time that DRUID has been hosted outside Denmark and the conference has already attracted a record number of submissions (460 papers). Moreover, members of the research team have had their work accepted for major international conferences, such as the Academy of Management Conference.

Our research has commanded attention in the popular press. In total, 16 newspaper articles and media features have showcased research from the wider programme.

Finally, our work has been influential in shaping policy through our engagement in leading policy communities and committees, such as the Council for Science and Technology, The Royal Society, Council for Industry and Higher Education (CIHE), HEFCE, RCUK, BIS, TSB and the BIS CIS 6 Project Board.

b. ESRC General Indicators for Reporting to Government

Please complete the table below, as well as separately giving more detailed information on indicators A-D in the format set out below the table.

Indicator	Number
Indicator A: Number of activities and events involving the general public	4
Indicator B: Number of projects attracting co-funding (leveraged funding attracted by the investment)	2
Indicator C: Number of public policy/business orientated seminars and workshops	4

<p>Indicator D:</p> <p>How many non-academic users have worked within the investment on a formal basis to complete a specific programme of work?</p> <p>How many researchers have the investment placed in user organisations on a formal basis to complete a specific programme of work?</p> <p><i>NB – placements funded through ESRC placement schemes should not be included.</i></p>	<p>Number of non-academic users hosted:</p> <p>(ii) Number of researchers placed in user organisations:</p>
<p>Indicator E: Number of non-academic users on the investment's Advisory Committee</p>	<p>(i) Total number of Advisory Committee members: 14</p> <p>(ii) Total number of non-academic user members:</p> <p><i>Including:</i></p> <p>Number of private sector members: 8</p> <p>Number of public sector members:</p> <p>Number of third sector members: 2</p>

Indicator A: Activities and events involving the general public

Title:	Date:	Format: [type of event (e.g. lecture/broadcast ...)]	Total number of participants:	Number of general public participants
UK~IRC Launch event and launch of research into impact of credit crunch on SME innovation	4 Mar 2009	Presentation		75
Research Development Workshop on University-Business Knowledge Exchange	4-5 Jun 2009	workshop	57	20
Innovate '09	13 Oct 2009	Exhibition – annual event by Technology strategy Board	30 (enquirers at UK~IRC's stand)	15
Research results on 'Knowledge Exchange between Academics and Business, Public and Third	20 Oct 2009	Presentation	89	40

Sectors'				
Innovation Summit	8 Dec 2009	Conference	91	35

Indicator B: Number of projects attracting co-funding (leveraged funding attracted by the investment)

Name of project:	Amount of external funding:	Name of co-funding body/bodies:	Start and end date of co-funding:	Specify whether private, public or third sector
Innovation Summit	£28,000	QinetiQ & IPGC	8 Dec 2009	

Indicator C: Public policy/business orientated seminars and workshops

Title:	Date:	Target audience: [private sector/public sector/practitioners/third sector]	Number of participants:
UK~IRC Launch event and launch of research into impact of credit crunch on SME innovation	4 Mar 2009	Open to all including private sector/public sector/practitioners/third sector	75
Research Development Workshop on University-Business Knowledge Exchange	4-5 Jun 2009	Open to all including private sector/public sector/practitioners/third sector	57
Research results on 'Knowledge Exchange between Academics and Business, Public and Third Sectors'	20 Oct 2009	Open to all including private sector/public sector/practitioners/third sector	89
Innovation Summit	8 Dec 2009	Open to all including private sector/public sector/practitioners/third sector	91

Indicator D: Number of (i) non-academic users hosted and (ii) number of researchers placed in user organisations *NB – Placements funded through ESRC placement schemes should not be included.*

Name:	Hosted: <i>[Where from?]</i>	Placed: <i>[Where to?]</i>	Dates:	Placement days or hours:	Purpose:
	None	None	None	None	None