

Engineering and Physical Sciences Research Council



# **ANNUAL REPORT AND ACCOUNTS 2015-16**



Presented to Parliament pursuant  
to Schedule 1 of the Science and  
Technology Act 1965

Ordered by the House of Commons  
to be printed on 13 July 2016

© Engineering and Physical Sciences Research Council (copyright 2016)

The text of this document (this excludes, where present, the Royal Arms and all departmental or agency logos) may be reproduced free of charge in any format or medium provided that it is reproduced accurately and not in a misleading context.

The material must be acknowledged as Engineering and Physical Sciences Research Council copyright and the document title specified. Where third party material has been identified, permission from the respective copyright holder must be sought.

This publication is available at [www.gov.uk/government/publications](http://www.gov.uk/government/publications)

Any enquiries regarding this publication should be sent to us at:

EPSRC  
Polaris House  
North Star Avenue  
Swindon SN2 1FL

Print ISBN 9 781474 130295

Web ISBN 9 781474 130301

ID 15031607 07/16

Printed on paper containing 75% recycled fibre content minimum

Printed in the UK by RCUK's Internal Service Provider on behalf of the Controller of Her Majesty's Stationery Office

# CONTENTS

## PERFORMANCE REPORT

Overview	02
Performance Analysis	15

## ACCOUNTABILITY REPORT

Corporate Governance Report	20
Remuneration and Staff Report	38
Parliamentary Accountability and Audit Report	50

## FINANCIAL STATEMENTS

Statement of Comprehensive Net Expenditure	55
Statement of Financial Position	56
Statement of Cash Flows	57
Statement of Changes in Taxpayers' Equity	58
Notes to the Accounts	59

# Performance Report

## Overview

### Statement from the Chairman and Chief Executive

As the UK's largest investor in engineering and physical sciences research and doctoral training we work with our partners to develop new ideas that save lives, protect the environment, inspire future generations and create prosperity.

We believe that strong economies are science economies that invest in research, discovery and innovation and last year we were able to demonstrate this through our analysis of the Research Excellence Framework data. In the past five years alone, research funded by EPSRC can be associated with £80bn of economic activity, including £16bn of cost savings. In addition, our investments have contributed to the creation of 400 new businesses, employing 50,000 people.

The highlights below provide a brief snapshot of the world-leading research and skills we have supported over the last year, demonstrating the breadth of our remit across sectors, ranging from health and energy to manufacturing and transport. They also emphasise our continued commitment to working in partnership with other funders, including other Research Councils, Innovate UK and industry, recognising that collaboration brings additional investment but also acceleration of impact.

#### **The Alan Turing Institute**

Since the appointment of Howard Covington as Chair of The Alan Turing Institute in April 2015, the Institute has continued to take strides forward with the appointment of Professor Andrew Blake as its first Director. In addition, there has been confirmation of £10m of research funding from Lloyd's Register Foundation, a research partnership with GCHQ, a collaboration with Cray Inc. and EPSRC, and a call for its first research activities. Formally launched on 11 November 2015 by the Minister for Science and Universities, Jo Johnson, the institute also announced a new strategic partnership with Intel and the creation of prestigious Alan Turing Fellowships.

#### **UK National Quantum Technology Programme (UKNQT)**

In September 2015, the UK's ability to lead the world in quantum science and technologies was boosted by a £12m investment for Quantum Technologies Fellowships. Announcing the fellowships, Science Minister Jo Johnson said: 'Pioneering researchers from across the UK are investigating game-changing applications for quantum technology, from advanced communications to improved cancer detection and navigation services. We want Britain to be the best place in Europe to innovate, and this £12m investment in UK research will support the next generation of scientists and secure our leadership in world-class quantum research.'

Later, in November 2015, 300 delegates filled the Royal Society in London for the first Quantum Technology Showcase. Research teams from universities and companies involved in the UKNQT Hubs demonstrated how the unique properties of the quantum realm are being used to advance technologies in measurement, security, computing, imaging and sensing. Projects to develop superfast cameras that can see round corners, ultra-sensitive gravity sensors that can find oil and gas reservoirs and unbreakable encryption systems that can detect eavesdropping of optical fibres were just some of the exhibits on show.

#### **Manufacturing the Future**

In November 2015 Science Minister Jo Johnson announced two £10m manufacturing research hubs that will address major, long-term challenges facing the UK's manufacturing industries, and capture opportunities from emerging research. The hubs will be based at the University of Southampton and Brunel University in London and will work in collaboration with academics at universities across the country. EPSRC's £20m investment will be enhanced by £14m from the universities and a further £58m from industry. Jo Johnson

## Overview

said: 'From cars to smartphones, our world-leading research drives innovation and growth in the UK's manufacturing industries. With this £92m investment, these new Manufacturing Hubs will develop the next generation of high tech products in communications and healthcare, as well as tackle industry challenges such as rising materials costs.'

### **£10 million for new maths centres to tackle life-threatening diseases**

Life Sciences Minister George Freeman announced in December 2015 a £10m investment in five new research centres around the UK that will explore how mathematics and statistics can help clinicians to tackle serious health challenges such as cancer, heart disease and antibiotic resistant bacteria. Located at universities in Liverpool, Glasgow, London, Cambridge and Exeter, researchers at the centres will develop new tools from predictive mathematical models to enable earlier diagnosis of chronic diseases such as epilepsy, and new systems to make clinical imaging more accurate and efficient.

### **Jaguar Land Rover and EPSRC announce £11 million autonomous vehicle research programme**

How can cars become fully independent of human direction? What is the best technology to incorporate into new vehicles and infrastructure? How will humans and vehicles interact with each other and their environment? These are just a few of the questions facing academics and industrialists who will be working on a new £11m research programme to develop fully autonomous cars. The research, which will take place at ten UK universities and the Transport Research Laboratory, was announced by Secretary of State for Business Sajid Javid during a visit to Jaguar Land Rover's facility at Gaydon in Warwickshire in October 2015. Sajid Javid said: 'The UK Government has no intention of being a passenger in innovation so is pioneering autonomous car technology in partnership with industry. This £11m research and development programme and the winning projects are a perfect example of this and will help to keep us at the forefront of the robotics revolution.'

### **Non-invasive device could end daily finger pricking for people with diabetes**

A new laser sensor that monitors blood glucose levels without penetrating the skin could transform the lives of millions of people living with diabetes. Currently, many people with diabetes need to measure their blood glucose levels by pricking their fingers, squeezing drops of blood onto test strips, and processing the results with portable glucometers. The new technology, developed by a team at the University of Leeds, uses a small device with low-powered lasers to measure blood glucose levels without penetrating the skin. It could give people a simpler, pain-free alternative to finger pricking. This could help improve the lives of millions of people by enabling them to constantly monitor their glucose levels without the need for an implant.

### **The UK's first carbon positive energy house**

Experts from Cardiff University have designed and built the UK's first purpose-built, low-cost energy smart house, capable of exporting more energy to the national electricity grid than it uses. The house, designed by a team based at the Welsh School of Architecture, has been built as a prototype to meet tough new targets for zero carbon housing set by UK Government. Designed and constructed as part of the Wales Low Carbon Research Institute's (LCRI) SOLCER project, and supported by SPECIFIC at Swansea University, its unique design combines for the first time reduced energy demand, renewable energy supply and energy storage to create an energy positive house. The design of the SOLCER House follows the 'Buildings as Power Stations' concept developed by the SPECIFIC Innovation and Knowledge Centre set up in 2011 with a £20m commitment over five years from EPSRC, Innovate UK and the Welsh Government, together with investment from Swansea University and its strategic industrial partners.

# Overview

## Brief History and Statutory Background

The Engineering and Physical Sciences Research Council (EPSRC) was founded as a Research Council and received its Royal Charter in 1994 following a review of its predecessor body, the Science and Engineering Research Council (1981-1994). It traces its history back to the foundation of the Science Research Council in 1965. Based in Polaris House, Swindon, it operates alongside the other Research Councils and Research Councils UK (RCUK). The EPSRC is a Non-Departmental Public Body sponsored by the Department for Business Innovation and Skills (BIS).

## Nature of Organisation

EPSRC is at the heart of discovery and innovation in the UK, and is the UK's main agency for funding research in engineering and the physical sciences. EPSRC invests around £900m a year in research and postgraduate training, to help the nation handle the next generation of technological change. The areas covered range from information technology to structural engineering, and mathematics to materials science. This research forms the basis for future economic development in the UK and improvements for everyone's health, lifestyle and culture.

The objectives for which the EPSRC was established are formally laid out within the Royal Charter:

- (i) to promote and support, by any means, high-quality basic, strategic and applied research and related postgraduate training in engineering and the physical sciences
- (ii) to advance knowledge and technology (including the promotion and support of the exploitation of research outcomes), and provide trained scientists and engineers, that meet the needs of users and beneficiaries (including the chemical, communications, construction, electrical, electronic, energy, engineering, information technology, pharmaceutical, process and other industries), thereby contributing to the economic competitiveness of our United Kingdom and the quality of life
- (iii) in relation to the activities as engaged in by the Council under (i) and (ii) above and in such manner as the Council may see fit:
  - o to generate public awareness
  - o to communicate research outcomes
  - o to encourage public engagement and dialogue
  - o to disseminate knowledge
  - o to provide advice.

The Vision and Goals as laid out within the Strategic Plan published in 2015 are:

**VISION** – The EPSRC vision is for the UK to be the best place in the world to research, discover and innovate

**GOALS** – The vision is supported by two goals which emanate from the Charter:

**Research and Discover** – For the UK to be positioned as an international research leader, where discovery thrives and our support generates the highest quality research in engineering and the physical sciences.

**Research and Innovate** – For the UK's excellent research base and talented researchers to work with us to accelerate innovation for the benefit of society and the economy.

# Overview

## Performance Summary

Our plans since 2011 have concentrated on shaping our portfolio to deliver high quality research for the UK and creating a high-quality training environment by increasing our support for cohorts of doctoral students. For 2015-16, building on our portfolio of high-quality research and postgraduate training, our focus was on generating the greatest possible impact and value from our investments. The following table summarises progress on our priorities for 2015-16:

Priority/Objective	Deliverables/Milestones	Progress/Commentary	Page
Research excellence: sustain world-leading research base in engineering and physical sciences disciplines	<ul style="list-style-type: none"> <li>Retain 60:40 balance between investment in research capability themes and 'challenge-led' themes</li> <li>Monitor UK performance based on citation impact analyses for Engineering and Physical Sciences (EPS) disciplines</li> </ul>	<ul style="list-style-type: none"> <li>Expenditure of £855.5m in EPS discipline areas, maintaining balance of expenditure at 54:46</li> <li>UK's citation impact in EPS continuing to increase (and currently leading with the USA)</li> </ul>	8
Contribute to growth and productivity through the support of industrially relevant research, and encouraging greater take-up of research outcomes, for example through increased leverage of external investment alongside our own	<ul style="list-style-type: none"> <li>Support a broad spectrum of research of relevance to key industrial sectors</li> <li>Maximise leverage from external partners</li> <li>Focus on shared planning and portfolio development with external organisations to optimise the UK innovation system</li> </ul>	<ul style="list-style-type: none"> <li>During 2015-16 just over £500m of new grants were announced with relevance to key sectors such as aerospace, manufacturing and communications, bringing the overall proportion of the portfolio with direct relevance to ~70%.</li> <li>The collaborative proportion of our portfolio with users is 56% with over £1,100m of leverage.</li> <li>Co-investment/leverage with InnovateUK is £21.8m.</li> </ul>	9
Invest in key challenge and technology areas including the next 'Great Technologies' such as Quantum Technologies	<ul style="list-style-type: none"> <li>Establish a national network of Quantum Technology Hubs to exploit quantum science for practical application</li> <li>Lead on the setting up of The Alan Turing Institute to establish the UK as a leader in Big Data</li> </ul>	<ul style="list-style-type: none"> <li>The UK National Quantum Technology Hubs had a showcase in November 2015 to gather communities together and highlight the latest advances in imaging, sensing, metrology, secure communication and computing.</li> <li>The Alan Turing Institute was officially launched in November 2015 together with a positive Gateway 4 Review. EPSRC successfully handed over formal accounting responsibilities in January 2016 and since then the institute has launched its first Fellowships scheme</li> </ul>	10

# Overview

Priority/Objective	Deliverables/Milestones	Progress/Commentary	Page
<p>Increase the numbers of highly skilled individuals in the key areas that the UK requires to build and sustain a high-tech economy</p>	<ul style="list-style-type: none"> <li>• Grow investment in cohort-style training, particularly the training that has industrial alignment</li> </ul>	<ul style="list-style-type: none"> <li>• For 2015-16, around 1,000 new Centres for Doctoral Training (CDTs) students started at more than 40 universities. There are over 1,400 user collaborators linked with CDTs that were current on 1 April 2016.</li> <li>• The new two-year Doctoral Training Partnerships (DTPs) grants have been announced. University statements of intent for the DTP have been assessed by an external panel.</li> <li>• Unconscious bias training has begun across EPSRC Council, Strategic Advisory Network (SAN), Peer Review Panel chairs and staff. RCUK and EPSRC action plans on Equality and Diversity have been agreed.</li> </ul>	<p>11</p>
<p>Work with university partners to identify further efficiencies such as shared use of capital equipment</p>	<ul style="list-style-type: none"> <li>• Efficiencies in admin resources, with a target of less than 2% of our annual budget</li> <li>• Focus on further efficiency savings from shared use of capital equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Maintained a high level of efficiency with 1.26% of our budget spent on admin.</li> <li>• EPSRC have led RCUK work with the University of Southampton to provide a portal that provides a 'shop window' for UK Higher Education equipment and facilities. This enables greater accessibility (of over 12,000 pieces of equipment) and encourages conversations to stimulate collaboration with over 45 institutions.</li> </ul>	<p>12</p>



# Overview

## Financial Highlights

A more detailed analysis of the financial highlights noted below can be found in the Financial Statements on pages 55 to 58.

Statement of Comprehensive Net Expenditure	2015-16 £000	2014-15 £000
Administration	12,095	14,365
Programme	895,258	934,004
<b>Net Expenditure</b>	<b>907,353</b>	<b>948,369</b>
<b>Other Comprehensive Net Expenditure</b>		
Net Gain of Revaluation of Non-Current Assets	(291)	(267)
<b>Total Comprehensive Net Expenditure</b>	<b>907,062</b>	<b>948,102</b>

Statement of Financial Position	As at March 2016 £000	As at March 2015 £000
Total Non-Current Assets	21,220	30,586
Total Current Assets	36,621	40,125
Total Current Liabilities	(39,172)	(50,311)
<b>Total Taxpayers' Equity</b>	<b>18,669</b>	<b>20,400</b>

Statement of Cash Flows	2015-16 £000	2014-15 £000
Net Cash Outflow from Operating Activities	(906,666)	(945,866)
Net Cash Outflow from Investing Activities	(14)	(9,659)
Net Cash Flows from Financing Activities	905,331	955,606
<b>Net (Decrease)/Increase in Cash and Cash Equivalents in the period</b>	<b>(1,349)</b>	<b>81</b>
<b>Cash and Cash Equivalents at the beginning of the period</b>	<b>14,001</b>	<b>13,920</b>
<b>Cash and Cash Equivalents at the end of the period</b>	<b>12,652</b>	<b>14,001</b>

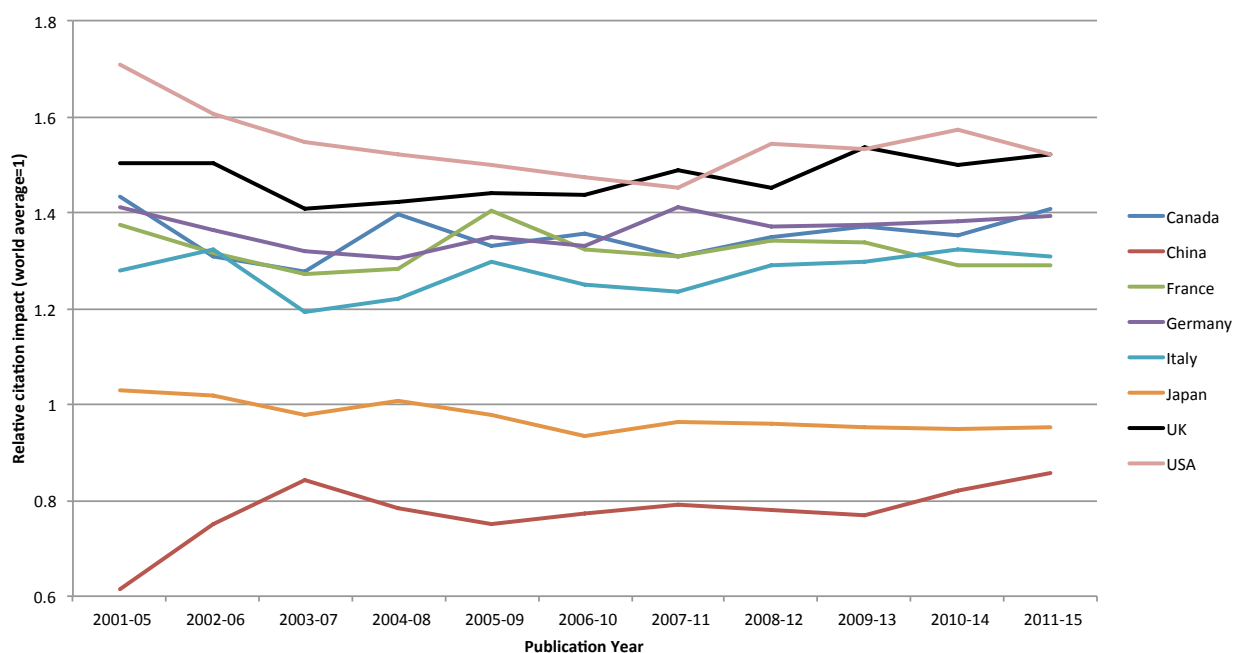
# Overview

## Research excellence: sustain world-leading research base in engineering and physical sciences disciplines

EPSRC plays a key role in maintaining UK strength in engineering and physical science (EPS) disciplines, encouraging a strong and vibrant research base.

EPSRC supports excellence across its portfolio, with analysis (up to and including 2015-16 data) demonstrating that collectively in the research areas within our remit, the UK's citation impact is continuing to increase. EPS research remains high quality as seen by the relative citation impact for the UK compared to comparator countries (fig. 1). The UK has been leading with the USA for at least the last decade and continues to remain strong. By ensuring agility in EPSRC's strategic approach, the UK remains a research leader even though emerging research nations such as China and India are investing heavily in EPS research.

**Fig. 1 Relative citation impact of EPS disciplines for the UK and comparator countries**



[Source: SciVal, Elsevier. This data is produced under licence from Elsevier.]

### UK's strong global research excellence in engineering and physical sciences recognised in prestigious award

Professor Martin Hairer, from the University of Warwick, became the **first UK-based mathematician to win the prestigious Fields Medal since 1998**. Professor Hairer, who held an EPSRC Advanced Research Fellowship from 2006-2012, was recognised for his 'outstanding contributions to the theory of stochastic partial differential equations, and in particular for the creation of a theory of regularity structures for such equations'. The Fields Medal, internationally regarded as the world's most prestigious award in mathematics, is awarded every four years and recognises the outstanding achievements of mathematicians aged under 40.

# Overview

## Contribute to growth and productivity through the support of industrially relevant research, and encouraging greater take-up of research outcomes

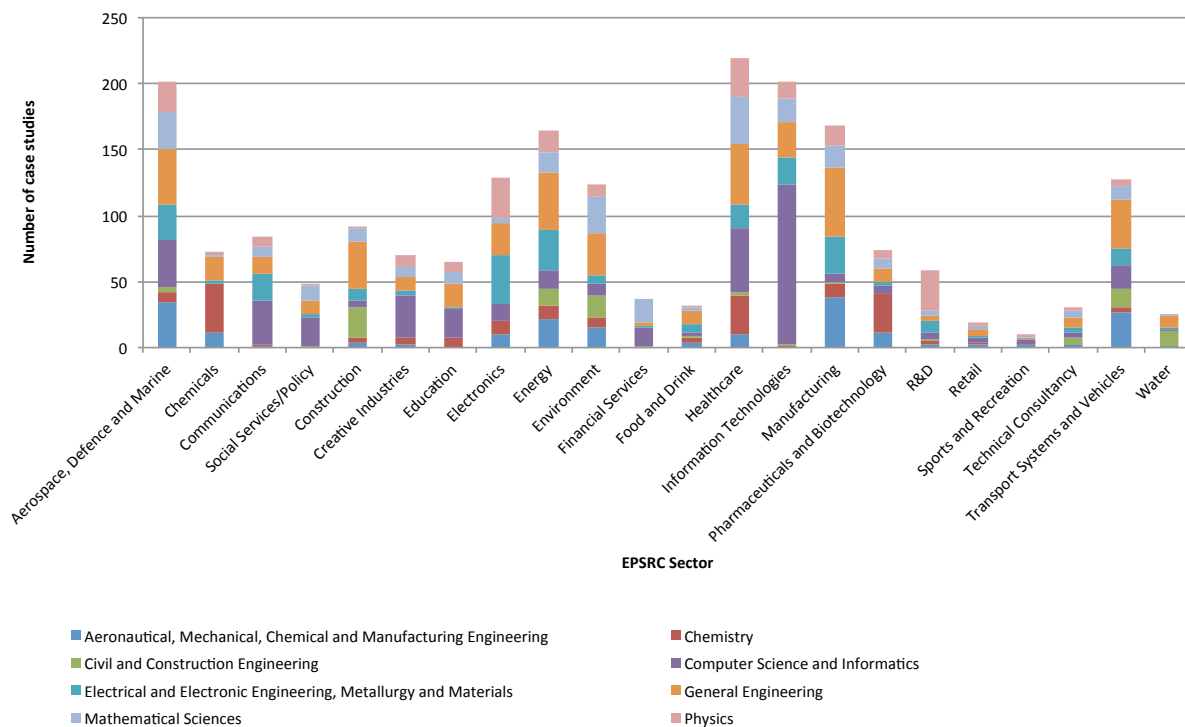
EPSRC delivers impact right across the spectrum of industrial and societal sectors, from manufacturing to creative media, promoting long-term growth and wellbeing. Our impact case studies analysis demonstrates that EPSRC investments have delivered significant value to the UK, including over £16bn cost savings and 400 new businesses, representing 50,000 jobs and a contribution of £4bn to the economy.<sup>1</sup>

### EPSRC Centres for Innovative Manufacturing support growth and productivity

EPSRC Centres for Innovative Manufacturing are part of a novel approach to maximise the impact of innovative research for the UK, supporting existing industries, and more importantly, opening up new industries and markets in growth areas. **There are 16 centres spread across the UK**, tasked with enabling the commercial development of key manufacturing research discoveries. They have a close symbiosis, often overlapping, **with Innovate UK's Catapults** and between them the centres and catapults cover more than 20 core fields of science, engineering and business including manufacturing, automation, the digital economy, future cities and continuous pharmaceutical manufacture.

EPSRC collaboration takes place across all industry sectors. EPSRC's REF 2014 impact case studies analysis highlights that EPS research produces impacts across every area of the economy and society; being key to productivity and growth. The report also cites notably high levels of impact from spin-outs, savings, intellectual property and turnover in healthcare, aerospace and defence, information technologies and manufacturing.

**Fig. 2 Mapping of EPS REF impact case studies to sectors<sup>1</sup>**



<sup>1</sup> [www.epsrc.ac.uk/newsevents/pubs/investing-in-excellence-delivering-impacts-for-the-uk-summary-report](http://www.epsrc.ac.uk/newsevents/pubs/investing-in-excellence-delivering-impacts-for-the-uk-summary-report)

## Overview

### Innovate UK partnerships

EPSRC works in partnership with Innovate UK to ensure that the pipeline of research and skills supports the growth of the UK economy. Co-funded investments between EPSRC and Innovate UK have been seen to enable initial discoveries that can then be taken forward with support from other funders. 2015-16 has seen EPSRC joint spending with Innovate UK at the value of £21.8m. EPSRC continues to strengthen the relationship with Innovate UK and ensure a steady flow of research and training into new products and services through schemes such as the Urban Living Partnership, Energy Catalyst Fund and Graphene co-investments.

#### Joint Energy Catalyst Fund

A new Energy Catalyst Fund of **£25m** provides investment and supports UK universities and businesses to advance the best concepts and innovative technologies in the energy sector. **Funded by EPSRC, Innovate UK and the Department of Energy and Climate Change**, it supports business-led projects **that develop innovative solutions to the energy trilemma of reduced carbon emissions, security of supply and affordability**. These challenges are creating major global market opportunities for which the UK can develop and grow innovative businesses to deliver world-leading solutions. Projects supported are based upon innovation that incorporates: new technologies and enhancement of existing technologies; components, sub-systems or systems; integrated whole system approaches; and enabling technologies for the energy system. Technology innovation that will help transform UK energy technology and create global markets for businesses.

### Invest in key challenge and technology areas including the next 'Great Technologies' such as Quantum Technologies

#### Quantum Technologies Hubs

The Hubs are part of the UK National Quantum Technologies Programme (led by the universities of Birmingham, Glasgow, Oxford and York, bringing together 17 universities and 132 companies) and are intended to draw together scientists, engineers and technologists from across the UK to explore how we can exploit the intriguing properties of the quantum realm. In particular, transformative impacts in key areas such as quantum metrology and sensors, quantum simulators, quantum computers and quantum secure communications are considered.

Impacts from this EPSRC investment are expected to be seen in our next delivery plan period between 2016 and 2020; however, an indication of the potential of this area can be seen from the £53m leveraged from business and users in 2015-16.

In September 2015, the UK's ability to lead the world in quantum science and technologies was boosted by a £12m investment for Quantum Technologies Fellowships as announced by the Minister for Universities and Science, Jo Johnson.

In November 2015, 300 delegates filled the Royal Society in London for the first Quantum Technology Showcase. Research teams from universities and companies involved in the UKNQT Hubs demonstrated how the unique properties of the quantum realm are being used to advance technologies in measurement, security, computing, imaging and sensing. Projects to develop superfast cameras that can see round corners, ultra-sensitive gravity sensors that can find oil and gas reservoirs and unbreakable encryption systems that can detect eavesdropping of optical fibres were just some of the exhibits on show.

## Overview

### The Alan Turing Institute and Data Sciences

Big Data offers significant opportunities across all areas of private and public sector activity, including infrastructure, cities and planning, manufacturing, healthcare and security. The Big Data marketplace could benefit the UK economy by £216m and create 58,000 new jobs in the UK before 2017. The Institute was formally launched on 11 November 2015 by the Minister for Science and Universities, Jo Johnson, with the aim of maintaining the UK's strength in the key areas of advanced mathematics and data sciences.

Since the appointment of Howard Covington as Chair of The Alan Turing Institute in April 2015, the Institute has continued to take strides forward with the appointment of Professor Andrew Blake as its first Director; confirmation of £10m of research funding from Lloyd's Register Foundation, a research partnership with GCHQ, a collaboration with Cray Inc. and EPSRC, a strategic partnership with Intel and a call for its first Research Fellows.

### Increase the numbers of highly skilled individuals in the key areas that the UK requires to build and sustain a high-tech economy

EPSRC provides excellent training opportunities in a strong research base, producing some 2,500 highly trained doctoral graduates per year with over a third going into the private sector, many of whom will become future business leaders.

All our routes to supporting studentships have the opportunity to be collaborative with industry. Our Centres for Doctoral Training (CDT) are examples of how we cover a wide spectrum of different collaborations with industry. Over the last year, more than 40 universities had their first intake of new students. The cohort style training of EPSRC CDTs brings together diverse areas of expertise to train engineers and scientists with the skills, knowledge and confidence to tackle today's evolving issues, and future challenges. They also provide a supportive and exciting environment for students, create new working cultures, build relationships between teams in universities and forge lasting links with industry.

**Doctoral Training Partnerships (DTP)** complement the CDTs and provide flexible funding for doctoral training. Universities can decide how the funding from a DTP is distributed to doctoral projects in any area of engineering and physical sciences and allows universities to be responsive to student recruitment and retention issues, to target growth areas, and to vary the length of support for individual students (between three and four years).

In 2015, EPSRC made some changes, including:

- two-year DTP allocation and early notification: To give institutions greater certainty and increased time with which to plan the use of DTP funding, DTP allocations will be made for two years. An institution will also receive information on its DTP allocation more than 12 months before the first student is due to start
- a request from each DTP holding university for a Statement of Intent, which outlined an institution's planned use of the DTP, particularly its strategy for distribution.

The panel which reviewed the DTP Statements of Intent saw the process as a valuable exercise that helped to address transparency and accountability. The panel also made some recommendations for minor changes for future statements, for example to think more creatively about the impact of the DTP investment and consider DTP outcomes with a wider perspective than individual student case studies and that more thought should be given to how to capture the range of collaboration possible on DTP-funded studentships.

## Overview

In 2015, we allocated £167m of DTPs for students starting in both 2016-2017 and 2017-2018 academic years. In 2015, The DTP represented about 45% of EPSRC investments in doctoral training (CDT about 45% and Industrial CASE about 10%).

### EPSRC Doctoral Training Partnership Changes

The new two-year Doctoral Training Partnership grants have been announced in March 2016. University Statements of Intent for the DTP were assessed by an external panel.

### Work with university partners to identify further efficiencies such as shared use of capital equipment

EPSRC recognises the need to invest in equipment, facilities and capital investments in order for world class research to take place and provide underpinning support to UK researchers.

Researchers across EPSRC's remit require access to high-quality research equipment and facilities in order to build a world-class research portfolio. This infrastructure ranges from lab-based equipment to international facilities such as the Diamond Synchrotron and Central Laser facility in Harwell. EPSRC focuses on ensuring the right infrastructure is available to EPSRC-sponsored researchers at the right time in the most economical way possible. In 2015-16, EPSRC has invested over £40m in the UK's research infrastructure.

Highlighted below are some of the many examples of where we have invested in the infrastructure to support our UK researchers.

### Multi-user equipment

EPSRC has invested in essential equipment that provides the underpinning **capacity** across the breadth of the EPS research portfolio. Such equipment is essential for **training the next generation** of scientists and engineers for UK employers. Regular refresh and renewal is required to keep it at the leading-edge. A recent call for such equipment has demonstrated the latent need for this, being over-subscribed by 600%. The proposed annual investment would have a major impact; for instance, our recent £31m investment:

- will support **£548m** of EPSRC grants and **£336m** of other research grants (RCUK, EU)
- will be accessible by **>3,500** researchers (864 students, 2,358 researchers and 371 academics), including **32** Centres for Doctoral Training, and **465** industrial partners.

## Overview

### Expanding the UK's national supercomputer

In 2014, EPSRC announced the investment of £10m in an upgrade of the shared **RCUK Advanced Research Computing High End Resource (ARCHER)** supercomputer in Edinburgh, increasing its computing power by approximately 60%, meaning that it has a theoretical top speed of over 2 Petaflops – a massive 2,000,000,000,000,000 operations per second. ARCHER has helped researchers to understand advanced materials at the nano-scale and modelled how the air flows around Formula 1 racing cars and aircraft in order to improve fuel efficiency. ARCHER has also allowed unprecedented resolution in a new, UK coupled climate model, together with the ability to look at far longer time periods, helping researchers to understand the interaction of powerful and rare events, such as hurricanes, with the rest of the climate system. Ultimately this will improve quantification of risk for society and, for example, the insurance industry.

A recent report published on ARCHER's now closed predecessor, the **High-End Computing Terascale Resource (HECToR)**, which enabled a broad range of research from weather forecasting to tracking heart rhythms, noise pollution to quantum chemistry, demonstrates how the UK has benefited from research carried out using the supercomputer. Written by independent experts, the report notes that 92% of the 2,500 HECToR users believe access to the facility improved the quality of their research; well over 100 PhD students were trained in high performance computing through HECToR; and more than 60 innovations have been supported by HECToR, a high proportion of which were considered to be 'major discoveries and pioneering breakthroughs'. The report concludes that there is no doubt about the importance to the UK of retaining a national High Performance Computing facility. The UK's strength in computational research is an indispensable tool in meeting major economic and societal challenges.

### Increasing efficiency through shared use of capital equipment

The equipment.data project at the University of Southampton was funded by RCUK (through EPSRC). In 2015, the developed website uses a relatively simple piece of programming technology that allows searching across published UK research equipment databases through one aggregation portal. It provides a 'shop window' for UK Higher Education equipment and facilities, enabling greater accessibility and importantly encouraging conversations with the aim of stimulating greater collaboration in the sector.

Making equipment over the Official Journal of European Union threshold discoverable through equipment.data was a key recommendation of Sir Ian Diamond's report 'Efficiency, effectiveness and value for money' published in 2015. To enable the broadest uptake of this portal EPSRC are working to transfer the service to Jisc and enable more institutions, including Further Education and museums etc, to benefit from letting their equipment be discoverable through it. Today equipment.data has grown to be a portal to over 12,000 pieces of equipment at 45 institutions and it continues to grow.

# Overview

## **Key issues Facing the Entity**

EPSRC's risk management process is designed to manage risk and not eliminate it. The quarterly review process allows risk owners to comment on mitigation actions and provide assurance that risks are being managed.

Strategic risks are identified through the Executive Leadership Team and regularly reviewed by Audit and Risk Assurance Committee and Council, who pay particular attention to those highlighted as significant high-level risks. It is through this process that EPSRC is able to manage the key headline risks that impact on the delivery of the EPSRC's programmes and operations and enables mitigating actions to be agreed and implemented.

The principal operational risks for EPSRC are the challenges posed by the current change agenda and the shared services environment (for more detail refer to the Governance Statement p25 while the principal strategic risks are those involving EPSRC's need to provide an appropriately robust evidence base of the value of current activities and the sustained impact of previously funded work and the need to enable researchers to deliver their full potential for excellent research and wide benefits to society and the economy.

## **Going Concern**

The financial statements have been prepared on a Going Concern basis. For full disclosure please refer to Note 1(a) of the Accounts.

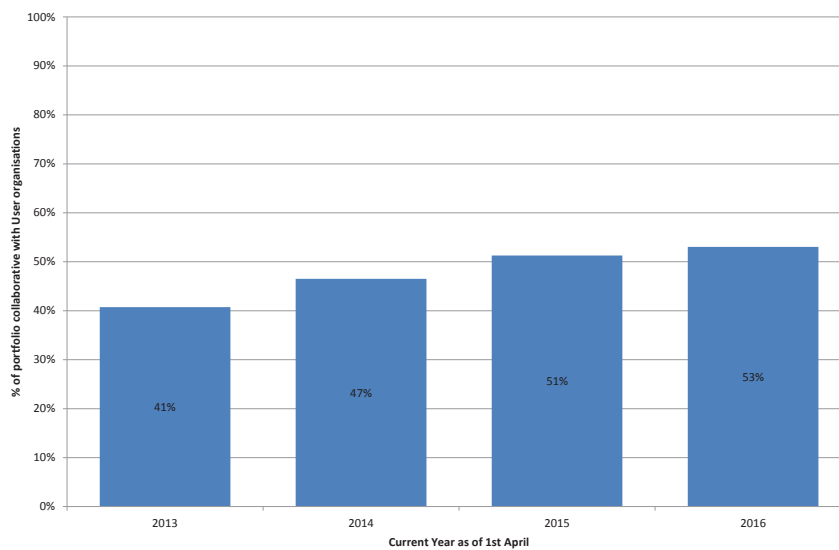


# Performance Analysis

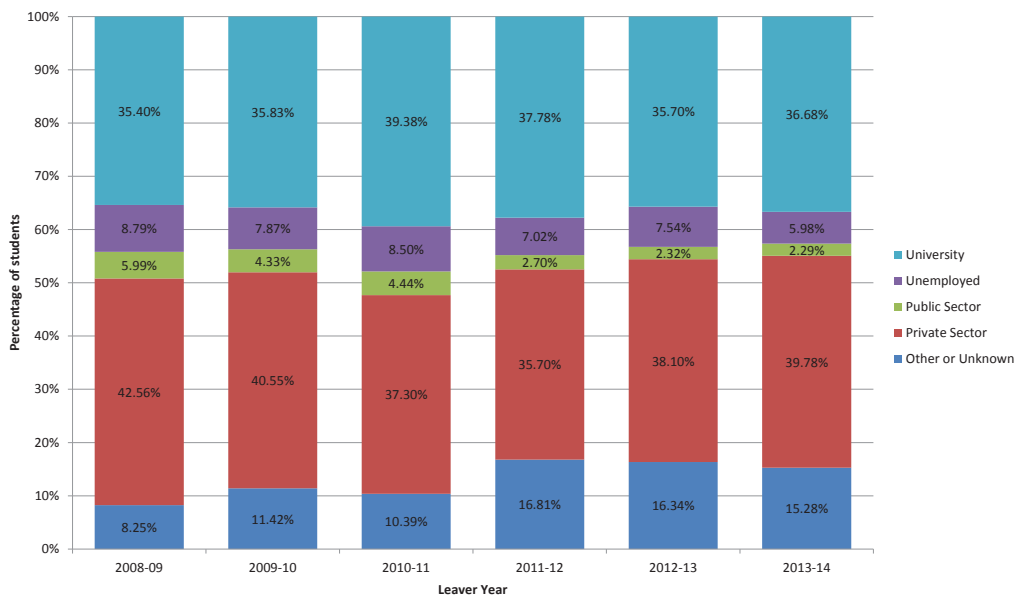
EPSRC's performance is measured against objectives across a large number of areas, helping the Council to provide funding across the range of engineering and physical science disciplines to academics carrying out excellent research at every stage of their career. Our Key Performance Indicators (KPIs) ensure that EPSRC funding responds to the requirements of the research community and results in research, which fosters new collaborations with industrial and other non-academic partners, informs public policy and ensures UK researchers are key players on the international stage.

## Performance against key performance indicators

Proportion of portfolio that is collaborative with non-academic partners'.



The chart below shows the destination trends for the last five years.

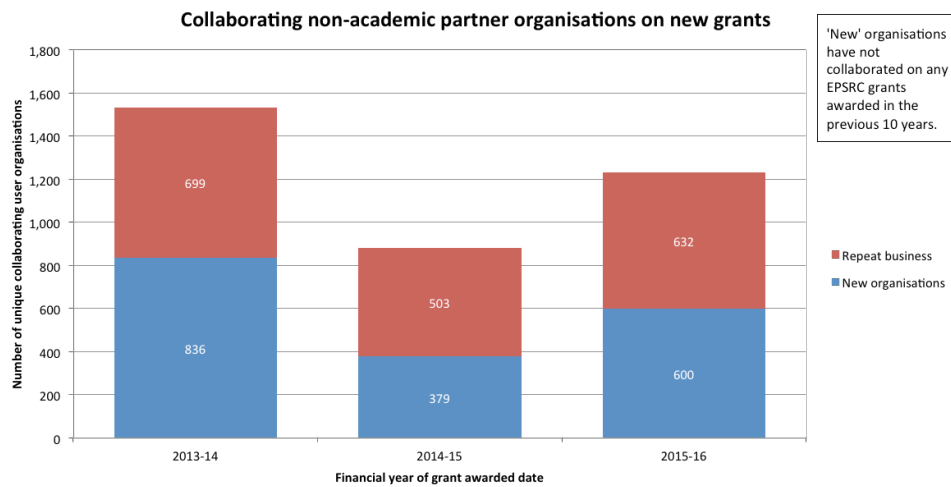


The Destinations of Leavers from Higher Education (DLHE) survey asks leavers from higher education what they are doing six months after graduation. About three quarters of leavers complete the survey.

# Performance Analysis

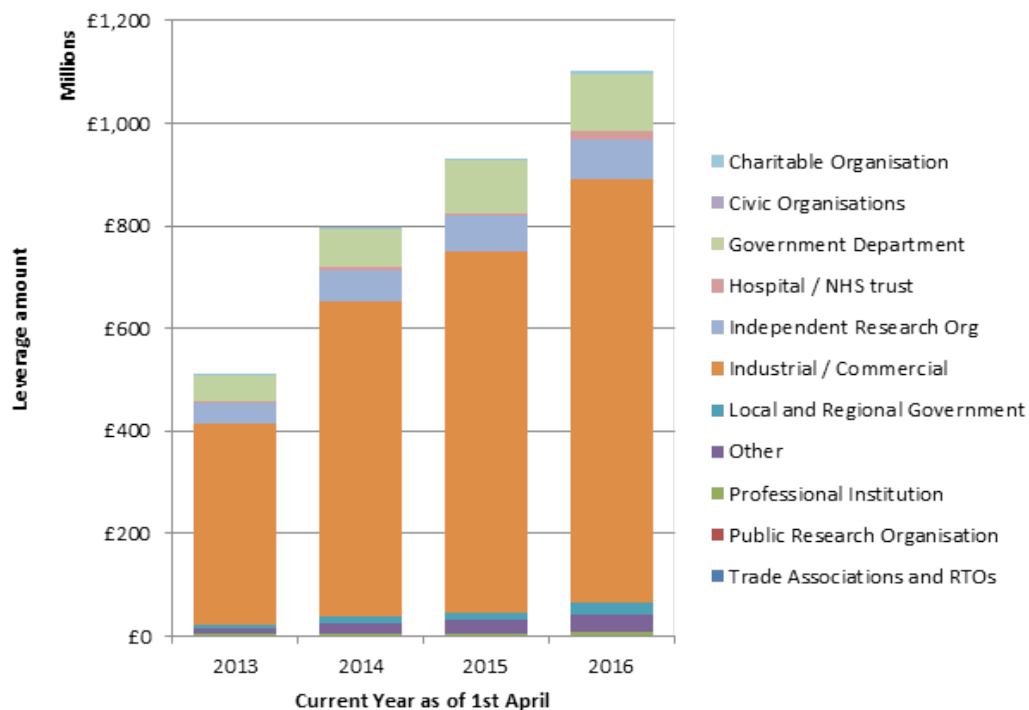
The chart below represents collaborating non-academic partner organisations on new grants awarded in year. The overall number of collaborating non-academic partner organisations on current grants as of 1 April each year has steadily increased over the last four years by 57% (2,260 in 2013 to 3,553 in 2016). The peak in 2013-14 is due to Collaborative Doctoral Training Awards (CDTs), where 35% non-academic partner collaborations exist due to CDT involvement.

## Collaborating non-academic partner organisations on new grants



EPSRC invests in approximately 8,500 doctoral students, representing 25% of all engineering and physical sciences PhDs, and 10% of all UK PhDs. Over 2,500 PhDs graduate each year having received EPSRC support, of which around one-third are collaborative with business. The chart below shows leverage on EPSRC's portfolio from non-academic partners.

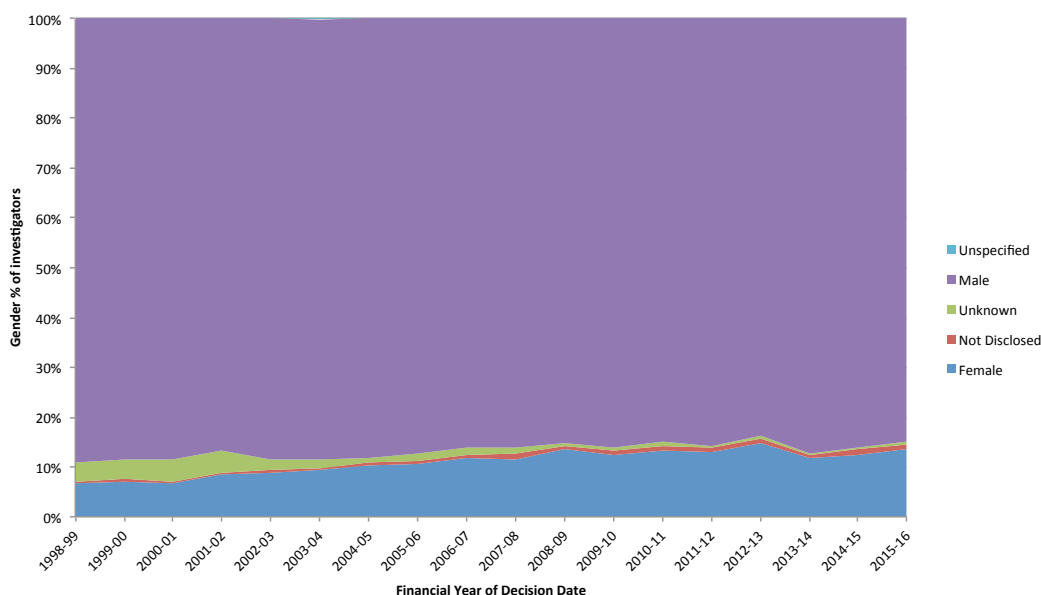
## Leverage on portfolio from user organisations - Leverage of total portfolio on 1 April each year



# Performance Analysis

Ensuring equality and diversity across the engineering and physical sciences community is of key importance to the Council and the chart below shows gender of awarded investigators by financial year of decision.

## Gender of awarded investigators by financial year of decision



## Financial Performance

EPSRC's source of financing is through Grant in Aid from BIS, which is based on the annual DEL allocation (outlined on page 18). Income contributions are derived from arrangements with third parties both within and external to central government.

Grant in Aid received from BIS for 2015-16 was £895.6m compared to £947.1m for 2014-15. This represents a decrease of 5.4%. The majority of the reduction was within the capital budget although both programme and administration allocations were also decreased. External funding rose by 9.7% from £25.7m (2014-15) to £28.2m for the current year, showing EPSRC's commitment to maintain a high level of research investment.

The accounts for the year ended 31 March 2016 recorded net expenditure of £907.4m compared with £948.4m for 2014-15, which is an overall decrease of 4.3% and consistent with the overall reduction in funding from BIS.

In the current year the ratio of expenditure on research and postgraduate training was 79.5% and 20.5% (81.1% and 18.9% respectively in 2014-15).

Whilst research expenditure fell from £762.9m (2014-15) to £717.2m (2015-16), there was a rise in postgraduate spend over the same period from £177.7m to £185.2m reflecting EPSRC's commitment to the investment in cohort style PhD training.

Net administration expenditure fell from £14.4m (2014-15) to £12.1m (2015-16) representing a reduction of 15.9%. Whilst over the last three years the administration budget has been around 1% of the total BIS allocation, EPSRC continue to try and make efforts to minimise back-office costs but at the same time ensuring the provision of front line research services are maintained.

# Performance Analysis

## Financial Position

EPSRC's non-current assets primarily consist of the investment in the supercomputer ARCHER and the share in the land and office premises held in Swindon. As at 31 March 2016, non-current assets had a carrying value of £21.2m (31 March 2015 £30.6m). The majority of the reduction largely consisted of the annual depreciation and amortisation charge, which are outlined within the financial statements (pages 55 to 58).

A professional revaluation exercise was undertaken by an independent external organisation for the land and buildings. This resulted in the gross value of land reducing by £0.3m, however this was off-set by the gross buildings value increasing by £0.8m.

Other movements within non-current assets comprised of an acquisition in intangible assets and a reclassification of property plant and equipment items to assets held for sale, which is recognised within current assets.

As at 31 March 2016 the value of current assets was £36.6m, which is a reduction of 8.7% from the preceding year (£40.1m). EPSRC's current liabilities of £39.2m are higher than current assets by £2.6m, and consist mainly of awards awaiting completion reports or just beginning.

Outturn	Resource	Capital	Total
Allocation	818,715	86,700	905,415
Outturn	818,519	86,042	904,561
<b>In year underspend</b>	<b>196</b>	<b>658</b>	<b>854</b>

## Reconciliation of Net Expenditure Between Allocation, Outturn and Accounts

<b>BIS Allocation:</b>	
Administration RDEL Near Cash	10,057
Programme RDEL Near Cash	798,805
Capital DEL	86,700
Programme RDEL Non Cash	9,553
Administration RDEL Non Cash	300
<b>Total</b>	<b>905,415</b>
Administration Expenditure per Management Accounts	9,080
Programme Expenditure per Management Accounts	799,810
Capital Expenditure per Management Accounts	86,042
Depreciation Expenditure per Management Accounts	9,629
<b>Expenditure per Management Accounts</b>	<b>904,561</b>
Capital additions	(14)
Notional Charge	2,769
Revaluation	37
<b>Net Expenditure</b>	<b>907,353</b>
Net Gain on Revaluation of Non-Current Assets	(291)
<b>Total Comprehensive Net Expenditure</b>	<b>907,062</b>

# Performance Analysis

## **Creditor's Payment Policy**

EPSRC observes HM Treasury Guidance and makes every effort to pay creditors within five days of receipt of invoice. Where this is not possible, the EPSRC observes the CBI's Prompt Payers' Guide, and adheres to the Principles of the Prompt Payers' Code, endeavouring to ensure compliance with the agreed terms of payment of creditors' invoices and to pay them within 30 days of receipt of goods and services. During 2015-16 an average of 86% of payments were made within five days (2014-15 86%).

## **Efficiency**

As set out as part of the 2010 spending review settlement, the Research Councils have been implementing an efficiency programme to drive down the costs and overheads associated with research. The efficiency savings derived from this programme are being re-invested in research.

For further details on the RCUK Efficiency Programme please refer to the Governance Statement on page 25.

## **UK SBS**

UK SBS provides operational and transactional services to EPSRC covering Finance, Human Resources, Information Systems, Procurement and Payroll. A review of UK SBS service delivery and the associated assurance issues are covered elsewhere within the Governance Statement.

## **Environmental Policy**

The Natural Environment Research Council (NERC) has developed a Cross Council Environment Policy, which is supported by EPSRC. EPSRC continues to work with other Research Councils and tenants of Polaris House, Swindon in ensuring the building's impact on the environment is as limited as possible. Currently 87.44% of waste is recycled – paper, metal, plastic, wood, food waste, old PCs and printers, mobile phones, toner cartridges, batteries and spectacles are all routinely recycled. An environmental plan for the site contains a number of objectives including ongoing waste reduction, introducing solar electricity and water heating, promoting and encouraging a site culture of recycle, reduce and reuse and enhancing the natural environment on site through introducing flora and fauna.

A Green Travel Plan for Polaris House has also been written and endorsed by RCUK's Executive Group to promote sustainable travel and reduce the environmental and social impacts of travel – both commuting and business travel. The plan outlines a number of short, medium and long term objectives, including promoting car share schemes and working with Swindon Borough Council to open park and ride schemes and improve bus facilities.

Due to its headcount and the floor area it occupies EPSRC is out of scope and has received an exemption from BIS for reporting against the Greening Government and Sustainability requirements.



**Professor Philip Nelson**, Accounting Officer

30 June 2016

# Accountability Report

## Corporate Governance Report

### Directors' Report

EPSRC is an independent non-departmental public body of the Department for Business, Innovation and Skills (BIS), established by Royal Charter. EPSRC's working relationship and lines of accountability with its sponsor department BIS are defined through a Management Statement and Financial Memorandum, which are subject to periodic review.

EPSRC's Chief Executive, in the role as Accounting Officer, is accountable to the public via Parliament. Parliament monitors and influences EPSRC's work through its Select Committees and the Parliamentary Ombudsman.

#### Council and Management Board

Council members remunerations for 2015-16 is listed in the Remuneration and Staff report (page 38). The Chairman is Dr Paul Golby and the Chief Executive Officer is Professor Philip Nelson.

#### COUNCIL MEMBERSHIP 2015-16

The following were members of the EPSRC Council in 2015-16:

Chairperson	Organisation
Dr Paul Golby, CBE, FREng	EPSRC
Chief Executive	
Professor Philip Nelson, FREng, Accounting Officer	EPSRC
Members	
Mr Jack Boyer, CBE	Entrepreneur
Professor Andrew Blake, FRS, FREng	The Alan Turing Institute
Professor Muffy Calder, OBE, FREng, FRSE	University of Glasgow
Professor Lord Ara Darzi, OM, KBE, PC, FRS, FMedSci, FRCSI, FRCS, FRCSE, FRCPGlas, FACS, FRCP, FREng	Imperial College London
Ms Bonnie Dean, OBE	Bristol & Bath Science Park
Professor Anthony Finkelstein, FREng, FCGI, MAE	Chief Scientific Advisor, Government Office for Science
Professor Sir Richard Friend, FRS, FREng	University of Cambridge
Professor Vernon Gibson, FRS	Chief Scientific Advisor, Ministry of Defence
Professor Richard Jones, FRS	University of Sheffield
Professor Tim Jones	University of Warwick
Baroness Brown of Cambridge, Julia King, DBE, FREng	Aston University
Dr Helen Neville, RSC	Procter & Gamble
Rt Hon Baroness Pauline Neville-Jones, DCMG, PC	House of Lords
Professor Matthew Rosseinsky, FRS	University of Liverpool
Dr David Watson, FREng	IBM UK Ltd
In attendance	
BIS Representative	BIS

# Corporate Governance Report

## EPSRC AUDIT AND RISK ASSURANCE COMMITTEE

### MEMBERSHIP 2015-16

<b>Name</b>	<b>Organisation</b>
Mr Richard Dale	University of Newcastle
Ms Bonnie Dean, OBE	Bristol & Bath Science Park
Professor Anthony Finkelstein, FREng, FCGI, MAE	University College London
Mr Stephen Hawker, CB, FIET	Independent
Professor Richard Jones, FRS	University of Sheffield
Ms Jane Madeley, MBA	University of Leeds
Mr Andy Nield	University of Bristol
Dr David Watson, FREng	IBM UK Ltd

### In attendance:

NAO and AASG	
Professor Philip Nelson, FREng, Chief Executive Officer	EPSRC
Mr Andrew Lewis, Chief Operating Officer	EPSRC

# Corporate Governance Report

## EPSRC STRATEGIC ADVISORY NETWORK (SAN)

### MEMBERSHIP 2015-16

<b>Name</b>	<b>Organisation</b>
Professor Paul Beasley	Siemens CT TIP Technology and Concepts
Dr Peter Bonfield, OBE, FREng	BRE Group
Professor David Bull, C.Eng, FIET, FIEEE	University of Bristol
*Professor Brian Collins, CB, FREng	University College London
Dr Jenny Cooper	Independent
Professor Rachel Cooper, OBE	Lancaster University
Professor Sir Ian Diamond, FRSE	University of Aberdeen
Professor Alicia El Haj	Keele University
Mr Peter Ellingworth	Association of British Healthcare Industries
Professor Alison Etheridge	University of Oxford
Professor Patrick Grant, FREng	University of Oxford
Mr Tom Hockaday	Isis Innovation Ltd, University of Oxford
Professor Karen Holford, CEng, FIMechE, FICE, CPhys, FInstP, FLSW	Cardiff University
Professor Alan Hughes	University of Cambridge
Dr David Jakubovic	Procter & Gamble Technical Centres Ltd
*Professor Cay Kielty, PhD	University of Manchester
Mr Jonathan Legh-Smith	BT Group plc
Professor Steven Ley, CBE, FRS	University of Cambridge
Professor Chris Linton, FIMA	Loughborough University
Professor Allan Matthews, FREng, BSc, PhD, CEng, FIMMM, FIMechE, FIET, FIMF	University of Sheffield
Professor Tom Melham, FRSE	University of Oxford
*Professor Kenny Mitchell, BSc (Hons), MSc, PhD	The Walt Disney Company Ltd and Edinburgh Napier University
*Professor Rachel O'Reilly, FRSC	University of Warwick
*Professor Richard Owen, BSc, PhD	Exeter University
Professor Lydia Plowman, FAcSS	University of Edinburgh
*Professor Paul Raithby	University of Bath
Dr Richard Seabrook, PhD, MBA	Wellcome Trust
Mr Philip Sharman	Independent
Professor Sarah Sharples, BSc (Hons), MSc, PhD, PGCAP	University of Nottingham



# Corporate Governance Report

Name	Organisation
Professor Mark Smith, PhD, MBA	Lancaster University
Professor Nigel Titchener-Hooker, CENg, FICChemE, FREng	University College London

\*Professor Brian Collins – retired September 2015

\*Professor Cay Kielty – resigned August 2015

\*Professor Kenny Mitchell – term ended May 2015

\*Professor Rachel O'Reilly – sabbatical September 2014 to August 2015

\*Professor Richard Owen – resigned October 2015

\*Professor Paul Raithby – term ended May 2015

## Conflict of Interest

The potential conflicts of interest for EPSRC are fully disclosed in Note 13 to the accounts on page 73. Full registers of interest for the EPSRC Council, Strategic Advisory Network and Audit and Risk Assurance Committee can be found on the EPSRC website ([www.epsrc.ac.uk/about/governance](http://www.epsrc.ac.uk/about/governance)).

## Directors Review

We as management have ensured that the National Audit Office team have been given all that they need in order to complete their audit.

## Personal Data related Incidents

There were no protected personal data related incidents formally reported to Information Commissioner's Office in 2015-16. The table below outlines eight incidents that were not deemed to be significant.

Please note that EPSRC data security policy and controls are disclosed in the Governance Statement on page 25.

## Summary of other protected data related incidents in 2015-16.

Category	Nature of Incident	Total
I	Loss of inadequately protected electronic equipment, devices or paper documents from secured Government premises	0
II	Loss of inadequately protected electronic equipment, devices or paper documents	0
III	Insecure disposal of inadequately protected electronic equipment, devices or paper documents from outside secured Government premises	0
IV	Unauthorised disclosure	5
V	Other	3

## Freedom of Information

EPSRC is subject to the Freedom of Information Act. During 2015-16 EPSRC provided information in response to 42 requests.

# Corporate Governance Report

## Statement of Accounting Officer's Responsibility

Under Section 2(2) of the Science and Technology Act 1965, the Secretary of State with the consent of HM Treasury has directed EPSRC to prepare for each financial year a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of EPSRC and its net expenditure, changes in taxpayers' equity, and cash flows for the financial year. In preparing the Accounts, the Accounting Officer is required to comply with the requirements of the Government Financial Reporting Manual ([www.gov.uk/government/publications/government-financial-reporting-manual-2015-to-2016](http://www.gov.uk/government/publications/government-financial-reporting-manual-2015-to-2016)) and in particular to:

- observe the Accounts Direction issued by the Secretary of State including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis
- make judgments and estimates on a reasonable basis
- state whether applicable accounting standards as set out in the Government Financial Reporting Manual have been followed, and disclose and explain any material departures in the financial statements; and
- prepare the financial statements on a going concern basis.

The Department for Business, Innovation and Skills has appointed the Chief Executive as Accounting Officer of EPSRC. The responsibilities of an Accounting Officer, including responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping proper records and for safeguarding EPSRC assets, are set out in the NDPB Accounting Officers' Memorandum issued by HM Treasury and published in 'Managing Public Money'.

As far as the Accounting Officer is aware, there is no relevant audit information of which the entity's auditors are unaware. The Accounting Officer has taken all the steps that ought to have been taken to be made aware of any relevant audit information and to establish that the entity's auditors are aware of that information.

The Annual Report and Accounts as a whole is fair, balanced and understandable and the Accounting Officer takes personal responsibility for the Annual Report and Accounts and the judgments required for determining that it is fair, balanced and understandable.

# Corporate Governance Report

## Governance Statement

### Headline

This Governance Statement sets out my assessment of EPSRC's potential vulnerabilities and capability to deal with the challenges facing us in our operating environment.

### Scope of Responsibility

As Accounting Officer, I have personal responsibility for maintaining a sound system of governance and internal control, which supports the achievement of EPSRC's policies, aims and objectives. I also safeguard the public funds and EPSRC assets for which I am responsible, ensuring they are properly accounted for and used economically, efficiently and effectively, in accordance with 'Managing Public Money' and the requirements set out in the Management Statement and Financial Memorandum agreed between EPSRC and its sponsoring department, the Department for Business, Innovation and Skills (BIS). I am supported in my role as Accounting Officer by a governance framework, which includes the Council, its Committees and Senior Management.

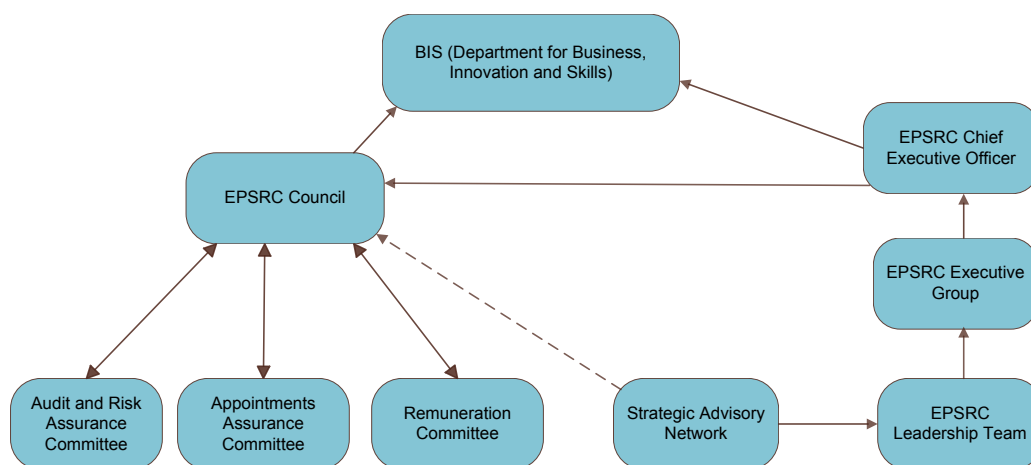
In forming my assessment I have examined the following sources of information:

- all Council and committee meeting minutes
- the work of internal audit, including work undertaken to evaluate funding assurance in UK universities
- the assessments of my individual directors as covered in their stewardship reports.

### Governance Framework

EPSRC is governed by its Council, which establishes and agrees the overall corporate strategy, key strategic objectives and deliverables of EPSRC, as set out in its Strategic and Delivery Plans. The responsibility for implementing the decisions of Council is delegated to me as the Chief Executive and Accounting Officer. The Council also reviews regular financial reports on the management and performance of EPSRC ensuring that appropriate action is taken to address any concerns identified, thus ensuring the good financial management of EPSRC. The Council also monitors the overall EPSRC risk profile as well as individual risks carrying a high degree of threat.

In carrying out this work the Council is advised by the Audit and Risk Assurance Committee and Appointments Assurance Committee. The Council sets the vision and strategic direction for EPSRC. The responsibility for carrying out key strategy is delegated to me as the Chief Executive. A diagram of the EPSRC's governance structure follows.



# Corporate Governance Report

In 2015-16 the council met five times and discussion, among other matters, included:

- 2015 Spending Review
- Delivery Planning
- Operational Cost Reduction Programme
- International Strategy
- Early Careers and Fellowships
- Independent Review of Fusion and Fission.

Council members are recruited through advertisement in the national press, with oversight provided by the Office of the Commissioner for Public Appointments (OCPA), and final appointments are subject to Ministerial approval. Members of Council and EPSRC's committees are listed on pages 20 to 23.

A review of Council effectiveness took place in April 2016. Council considered the outcome of the effectiveness review at its meeting on 11 May and noted that it was largely positive and did not identify any areas of particular concern which needed to be addressed.

The Audit and Risk Assurance Committee (ARAC), which includes independent members in addition to Council members, met four times during the year. Members are appointed by Council.

The Committee provides assurance to Council and to me, as Accounting Officer, by reviewing the adequacy and effectiveness of EPSRC's framework of governance, risk management and controls; reviewing the annual accounts, and accounting policies, on behalf of Council and overseeing the outcomes of work by the internal and external auditors. The Committee supports discussion at Council through updates and briefings from the Committee Chair who is also a Council member.

The next effectiveness review of the Committee is due in 2016-17.

The attendance of members at Council and the ARAC, for which they were eligible to attend, can be found in the following table with 2014-15 comparative figures for the total shown in brackets.

# Corporate Governance Report

Name	Attendance at Council	Attendance at Audit and Risk Assurance Committee
Professor Andrew Blake	4 out of 5	
Mr Jack Boyer	3 out of 5	
Professor Muffy Calder	5 out of 5	
Mr Richard Dale		2 out of 3
Professor Lord Ara Darzi	3 out of 5	
Ms Bonnie Dean	5 out of 5	2 out of 3
Professor Anthony Finkelstein	4 out of 5	3 out of 4
Professor Sir Richard Friend	5 out of 5	
Professor Vernon Gibson	2 out of 5	
Dr Paul Golby	5 out of 5	
Mr Stephen Hawker		4 out of 4
Professor Richard Jones	5 out of 5	4 out of 4
Professor Tim Jones	5 out of 5	
Professor Dame Julia King	5 out of 5	
Mrs Jane Madeley		3 out of 4
Professor Philip Nelson	5 out of 5	
Dr Helen Neville	3 out of 5	
Rt Hon Baroness Pauline Neville-Jones	5 out of 5	
Mr Andy Nield		3 out of 3
Professor Matthew Rosseinsky	4 out of 5	
Dr David Watson (Chair of ARAC)	5 out of 5	4 out of 4
<b>Total 2015-16</b>	<b>86%</b>	<b>86%</b>
<b>Total 2014-15</b>	<b>(81%)</b>	<b>(90%)</b>

# Corporate Governance Report

EPSRC Leadership Team (ELT) comprises myself as Chief Executive, Directors and Associate Directors and is the Executive body for EPSRC. It normally meets weekly and its governance responsibilities are to manage EPSRC operations and finances in line with EPSRC's 2015-16 delivery plan, as well as monitoring associated risks.

The Remuneration Committee is responsible for advising the Council on matters relating to the remuneration of Directors and other pay-related matters for senior staff. BIS determine the salary for my role as Chief Executive Officer.

The Appointments Assurance Committee is a sub-committee of Council comprising of three Council members, one of whom is the Chair of the Audit and Risk Assurance Committee, the others being the Chair of Council and EPSRC's Chief Executive Officer. It normally meets three times a year. It is responsible for reviewing the adequacy and robustness of the nomination and selection processes and confirming new appointments to the Audit and Risk Assurance Committee and to EPSRC's strategic advisory bodies, Strategic Advisory Network (SAN) and Strategic Advisory Teams (SATs). In addition, this sub-committee also provides advice to Council on its own composition and assists with the development of recruitment specifications for Council vacancies.

The SAN provides the Executive of EPSRC with strategic advice that will assist us to develop, implement and modify plans, and to make appropriate recommendations to our Council. The Network is devised as a flexible resource, enabling the Executive to obtain the advice it needs in a timely manner, and drawing on a range of perspectives from across our key stakeholder groups including academia, business, third sector and Government.

The SAN is made up of around 30 prominent and highly regarded individuals who have an established record of achievement and bring a broad strategic view to bear. Members bring expertise from their own background, but are required to advise across the breadth of EPSRC's portfolio.

In 2015-16 a new governance model was agreed to cover the collective activities of the Research Councils. The RCUK Executive Group has been replaced by the RCUK Strategic Executive, with membership comprising of the seven Research Councils' CEOs plus the RCUK Executive Director. Work will continue in 2016-17 to develop the further tiers of governance to support the new group and its sub-boards.

EPSRC continues to comply with the policies set out in the Cabinet Office 'Principles of Good Corporate Governance in Executive Non Departmental Public Bodies'.

## **Approach to Risk Management**

In 2015-16 a new harmonised risk management policy and process was introduced across AHRC, EPSRC and ESRC (the three Professional Support Unit (PSU) Councils). This is based on the guiding principles of managing risk within the public sector, representing best risk practice whilst being proportionate to the level of risk exposure and risk appetite within the three PSU Councils.

EPSRC's role is to support independent, high quality research and postgraduate training, as well as the impact that engineering and physical sciences research can have in the business, public and third sectors. At any one time we support a significant number of researchers and postgraduate students in academic institutions and independent research organisations. Some research, by its pioneering and innovative nature, carries risk, but we have a very low risk appetite in terms of the way we conduct our business. We work only with eligible research organisations and make our investment decision using a transparent peer review process, details of which can be found at: [www.rcuk.ac.uk/funding/peerreview](http://www.rcuk.ac.uk/funding/peerreview)

EPSRC's risk management process is designed to manage risk and not eliminate it. The quarterly review process allows risk owners to comment on mitigation actions and provide assurance that risks are being managed.

# Corporate Governance Report

Strategic risks are identified through the ELT and reviewed by the Audit and Risk Assurance Committee and Council at each meeting, who pay particular attention to those highlighted as significant high-level risks. It is through this review process that EPSRC is able to manage the key headline risks that impact on the delivery of EPSRC's programmes and operations and enables mitigating actions to be agreed and implemented. A good example was the setting up of The Alan Turing Institute, which carried significant risk but was successfully managed and implemented with regular reporting to both Council and ARAC.

Overall, I am satisfied that, with effective input from Council and ARAC, risk is being managed successfully within EPSRC.

## **Significant Risks in 2015-16 and Key Mitigating Factors**

This section covers the most significant risks faced in 2015-16 and the key mitigations in place. These risks are either of a long-term, ongoing nature and require continued risk management or have yet to be managed down sufficiently.

### **UK Shared Business Service (UK SBS)**

The announcement to transfer all services provided by UK SBS to other service providers and disband UK SBS within the next three years has created uncertainty around the ability of UK SBS to continue to maintain service delivery during this period of change. If there is prolonged uncertainty and the ongoing issues regarding the stability, security and resilience of the 12.0.6 Oracle platform remain unaddressed then this may result in severe operational risk and directly impact on EPSRC's ability to conduct its core business. The need to have in place processes and plans to cover any system failure is therefore required, which is dealt with in more detail under the UK SBS section. EPSRC is also engaged with UK SBS at different levels and across various groups to help manage effectiveness and the stability of services.

### **Higher Education White Paper**

The ability of EPSRC to continue to deliver its aims and objectives must be seen in the context of the wider change agenda faced by all Research Councils, with the most significant of these being the impact of the Higher Education White Paper, Success as a Knowledge Economy, which followed the Nurse Review. The White Paper sets out Government plans, through legislation, for the creation of a new organisation called UK Research and Innovation, to incorporate the functions of all seven Research Councils, Innovate UK and HEFCE's research and knowledge exchange functions. This will present significant governance challenges to all Research Councils over the next two years. EPSRC will be fully engaged in this process, which will be reflected in future Governance Statements. We are working collaboratively with BIS to identify and actively mitigate any risks.

While announcements were awaited on the recommendations made in the Nurse Review, the Research Councils collectively looked at operational efficiency in 2015-16 through the Operational Cost Reduction Programme (OCRP), as covered later in this statement. This will continue into 2016-17 through the RCUK Change Programme, which has succeeded OCRP. The risk remains that uncertainty may affect staff and place additional demands on resource. This may in turn make it difficult to maintain 'business as usual' in the transition leading to the new structure unless mitigations are in place. EPSRC is fully engaged in the RCUK Change Programme at both strategic and operational levels and will continue to influence the agenda where possible.

### **Funding**

With a reduction to programme budgets and stretched administrative resources the risk of delivery pressures exists. There is also the reputational risk that the rationale for difficult funding decisions taken in response to the Spending Review is not sensitively communicated to the wider EPSRC community. Steps have been taken to develop commitment plans to accommodate revised budgets with a clear widespread communication strategy to reach out to the research community and the wider stakeholder base.

# Corporate Governance Report

## Efficiency

### Efficiency Programme

Since 2010, in response to Sir William Wakeham's report *Financial Sustainability and Efficiency in Full Economic Costing of Research in UK Higher Education Institutions*, the Research Councils have been implementing an efficiency programme to drive down the costs and overheads associated with research. The efficiency savings derived from this programme are being re-invested in research.

The combined savings across all Research Councils for the four-year period up to March 2015 was £396m against the target of £428m. In May 2014 the original four-year programme was extended by one additional year and so will now continue until April 2016. Incomplete data for the savings in 2015-16 indicate that the four-year target was met within 4½ years from the start of the programme. The 2015-16 results will be published in 2016-17.

Details can be found in the RCUK Efficiency Programme Annual reports 2011-15 available at: [www.rcuk.ac.uk/Publications/policy/Efficiency2011](http://www.rcuk.ac.uk/Publications/policy/Efficiency2011)

### RCUK Change Programme, formerly Operational Cost Reduction Programme (OCRP)

The Research Council Chief Executives have agreed to take a collective, Research Council-wide, programme approach to operational efficiency and through an Operational Cost Reduction Programme (OCRP) target savings over the next three years.

In March 2016 the RCUK Strategic Executive, comprising the Research Council Chief Executives and the RCUK Executive Director, agreed for the programme to include wider change. The focus would now be on centralising and moving to single operating models in identified functional areas alongside the Grants Delivery Platform and the safe transition of UK SBS services and building works. The Strategic Executive agreed the programme should be called the RCUK Change Programme, building on the existing OCRP team and board members in order to resource and support the wider change programme and would move to a two-year programme.

The programme has been in mobilisation phase during 2015-16 with outline business cases covering the nine constituent projects submitted to the Programme Board in February. After review these cases were subsequently reviewed and agreed by the RCUK Strategic Executive in March.

### Professional Support Unit (PSU)

The PSU, hosted by the Arts and Humanities Research Council (AHRC), provides professional services to AHRC, EPSRC and ESRC (the PSU Councils) in: Finance; Human Resources; Information Technology (hosts services on behalf of non-PSU Councils); Project Management; and Reprographics. The Head of PSU received the appropriate 2015-16 delegations from the PSU Councils, which allowed the services to be delivered.

During 2015-16 the Head of PSU attended a meeting of the Audit and Risk Assurance Committee, which allowed governance issues to be discussed and challenged. The PSU is overseen by a Management Board comprising the Chief Executive Officers (CEOs) and a Director from each of the PSU Councils, which meets quarterly. The Management Board received regular reports and an annual report from the Head of PSU that provided assurance on the level of service being delivered, the financial position and the risks being managed.

The Head of PSU produced an Annual Assurance Statement covering 2015-16. The statement provides assurance to the CEOs that the PSU has in place appropriate systems and controls to support the services being delivered.



# Corporate Governance Report

In 2015-16, the PSU finance function undertook a Financial Management Review by way of a self-assessment using the Chartered Institute of Public Finance and Accounting (CIPFA) Financial Management Model in accordance with BIS and HM Treasury best practice. The finance support provided to the PSU Councils was found to be generally strong with recognition of the efforts invested in developing a strong common financial reporting and final accounts process. The creation of the PSU was also seen as a commitment by the PSU Councils to collaborate to develop better and more value for money solutions to the provision of their services.

The PSU recognises that future developments in respect of the RCUK Change Programme and the implementation of the Nurse Review will impact on its future. These are reflected in the PSU Risk Register with the Head of PSU fully engaged in the wider Research Council discussions during 2015-16

## Other Key Governance Activities

### Pay Remit

Pay setting arrangements throughout the civil service are set out in guidance issued by HM Treasury. However in respect of the 2015-16 pay remit the cross council pay consortium's (AHRC, BBSRC, ESRC, EPSRC and STFC) staff structure was slightly different to that modelled in the HMT-approved pay remit submission. Although within the overall pay envelope, the implementation resulted in the cross council pay consortium exceeding the approved Consolidated Pay limit by less than 1%, an immaterial value to these accounts. Retrospective approval has therefore been sought from BIS and HM Treasury and is awaited at the time the Accounting Officer signed these accounts. We will again review the internal processes over the management and regularity of pay remits to ensure compliance in the future.

### Information Management

The PSU Information Management Team is responsible for:

- Records Management
- Freedom of Information
- Data Protection
- Information Security.

This service is provided for EPSRC alongside the other PSU Councils, providing a common approach and a body of expertise.

During 2015-16 AASG conducted an audit on Information Security, which identified a number of weaknesses in dealing with potential data breaches. The identified areas have now been strengthened by the PSU Information Team.

EPSRC has in place a system of control for Information Risk, which is reflected in the annual Information Security Health Check submitted to BIS. The health check requires organisations to have plans in place to deliver full compliance with mandatory security outcomes. AASG reviewed the health checks of all Research Councils prior to submission to BIS and were satisfied that the appropriate plans were in place.

EPSRC is committed to safeguarding information and personal data. In 2015-16, there was one incident where a lapse in the security of personal data resulted in the need to report an incident to BIS. In consultation with BIS it was agreed that the incident in question was not severe enough to require reporting to the Information Commissioner's Office.

# Corporate Governance Report

## Health and Safety

PSU have produced a health and safety report for 2015-16, which contains no issues that need to be reported in this statement.

## Transparency

EPSRC is committed to the transparency agenda introduced by the Government to allow visibility of how public funds are used and managed. I can confirm compliance with all the disclosure requirements which are made on our website and which are referenced on the DATA.GOV.UK website. The transparency disclosure made by EPSRC covers:

- EPSRC organisation structure
- salary bands and senior posts
- Government Procurement Card transactions
- all expenditure.

## Ministerial Directions

There were no Ministerial Directions given in 2015-16.

## Tax Arrangements of Public Sector Appointees

The Alexander Review, published in May 2012, made a number of recommendations to ensure that the highest standards of integrity could be demonstrated in the tax arrangements of senior public appointees. I can confirm that all of EPSRC's senior staff are paid through a formal payroll facility and that arrangements are in place through retained HR to provide assurance that appropriate tax arrangements are in place to cover any other appointees covered by the report.

In 2015-16 EPSRC identified two contractors who fell within the Alexander Review criteria. EPSRC has sought and gained assurance that the appropriate tax arrangements are in place for the contractors identified.

Council members are 'office holders' as defined within HMRC guidance, and their remuneration is subject to Pay as you Earn (PAYE) with income tax and employee National Insurance Contributions (NICs) deducted at source through the payroll.

As such, EPSRC is in compliance with the recommendations in the HM Treasury 'Review of the tax arrangements of public sector appointees' published in May 2012.

## MacPherson Review

The review of quality assurance of Government analytical models undertaken by Sir Nicholas MacPherson and published by HM Treasury in March 2013 made a number of recommendations for government departments and their Arm's Length Bodies. To comply with this review and the BIS requirements EPSRC have reviewed their use of analytical modelling in 2015-16 and have not identified any that were considered to be business critical.

## Austerity Measures

EPSRC has robust control processes, checks and reporting arrangements in place to review and manage expenditure in keeping with the austerity measures introduced by Government in May 2010. This includes all expenditure being approved through a formal process of delegated authority and monthly reporting to budget holders.

# Corporate Governance Report

## Regularity and Propriety

EPSRC requires all staff, including Council and groups within the governance structure to act honestly and with integrity and to safeguard the public resources for which they are responsible.

EPSRC follows the harmonised Counter Fraud & Bribery policy, which was adopted by all seven Research Councils in 2014-15 and which is subject to annual review by the PSU Head of Risk & Governance. All staff are reminded of the policy on an annual basis which is available through the PSU portal, thus ensuring that there is an awareness of their responsibilities to report fraud and the process by which to do so. All staff are also required to undertake annual E-Learning awareness training covering counter fraud and bribery and in 2015-16 this was completed by 100% of staff.

The PSU Head of Risk and Governance also attends the BIS Counter Fraud Working Group where best practice is shared and current fraud issues discussed.

Consistent with the other Research Councils, EPSRC has established a harmonised Whistleblowing Policy. The Whistleblowing Policy encourages and enables employees to speak out when they encounter or suspect malpractice. It guarantees whistle-blowers protection consistent with Public Interest Disclosure Act (PIDA) and facilitates whistleblowing through a number of routes.

I can confirm that for 2015-16:

- neither I nor my staff authorised any course of action, the financial impact of which is that transactions infringe the regulatory requirements as set out in Managing Public Money
- there were no novel, contentious or repercussive transactions that required BIS or Treasury approval
- there were no cases of whistleblowing
- there were no instances of fraud identified within EPSRC; or within UK SBS which impacted on EPSRC.

## Review of Effectiveness

As Accounting Officer, I have responsibility for reviewing the effectiveness of governance, risk management and other internal controls at the EPSRC to ensure a sound system of internal control is being maintained. In 2015-16 this review has been informed by the work of the EPSRC's Directors, the Audit and Risk Assurance Committee, the internal audit service provided by AASG, comments from the external auditors and cross-Council assurance programmes. The conclusion of my review is covered below.

## EPSRC Directors

EPSRC Directors produce an annual statement on the internal control framework within their areas of responsibility. The statements are then consolidated into a single report, which provides me with a level of assurance on the internal control framework. Whilst some issues have been raised in respect of UK SBS, which will be addressed during 2016-17 and covered later in this statement, I am content that the 2015-16 report provides me with reasonable assurance that a sound internal control framework is in place.

## Audit and Risk Assurance Committee

I have examined the reports of the Audit and Risk Assurance Committee meetings including their review of internal controls, governance and risk management processes. I also attend Audit and Risk Assurance Committee meetings and, other than the UK SBS issues (which are covered below) any issues that have been raised with me by the Committee have been addressed and reported back to the committee.

# Corporate Governance Report

## Internal Audit

Internal Audit is provided by AASG. The Director of AASG is required to provide me with an opinion on the overall adequacy and effectiveness of EPSRC's framework of governance, risk management and internal control. This opinion is informed by the internal audit work completed during the year, in line with the internal audit plan agreed by management and the Audit and Risk Assurance Committee. The work of AASG provides assurance in two areas: core EPSRC activities and cross-Council activities with an EPSRC involvement.

In 2015-16 AASG was able to provide EPSRC with an overall Moderate Level of assurance on the adequacy and effectiveness of EPSRC's controls and governance processes. The assurance categories used by AASG changed for 2014-15 and a Moderate rating can be broadly aligned to the previous Substantial rating. The definition is:

- Some improvements are required to enhance the adequacy and effectiveness of the framework of Governance, Risk Management and Control.

During the year a number of audits and assurance work were undertaken within the two areas of activity. The implementation of recommendations that relate specifically to EPSRC is by PSU with progress reports presented to each Audit and Risk Assurance Committee meeting.

## Core EPSRC Audits

The Core audits undertaken in 2015-16 were:

- major scientific investments – substantial
- HR recruitment and planning – substantial
- PSU – disaster recovery and business continuity – unsatisfactory
- PSU – information security – policy and action planning – limited
- Holmes Hines Memorial Trust – substantial
- Follow up of audit recommendations – advisory.

All accepted recommendations in relation to the above audits have implementation plans in place. The most significant issue raised in the Disaster Recovery and Business Continuity audit was the lack of an adequate disaster recovery plan within UK SBS. The activities of the Research Councils in respect of Disaster Recovery and Business Continuity are covered within the UK SBS section. The issues raised within the Information Security audit are covered above within the section on Information Management.

## Cross Council Audits

In 2015-16 AASG carried out 16 cross-Council activities that were relevant to EPSRC.

Where recommendations relate specifically to EPSRC their implementation is closely monitored by PSU on behalf of EPSRC. The recommendations of a cross-Council nature are monitored through the cross-Council Risk & Assurance Network or through the appropriate functional governance group within the Councils.

The control frameworks for business continuity, disaster recovery and prevention and detection of cyber security threats have been subject to audits. Whilst controls already exist these areas should always be subject to a plan of continuous improvement and as such resilience will be strengthened. Work took place in 2015-16 to take this forward and will continue into 2016-17.

## Cross Research Council Funding Assurance Programme

Across the RCUK community research funding in the 2015-16 draft accounts totals £2.9Bn of which £900.4m relates to EPSRC. The EPSRC funding landscape has two cash funding streams: firstly, grants administered through the SIEBEL system (£817.9m) and awarded to eligible Research Organisations (ROs) and secondly, funding distributed outside the SIEBEL system (c£75.9m) including Strategic Partnerships.

### SIEBEL Grants

I am assured on the regularity of spend within the community through a range of mechanisms:

- The Funding Assurance Programme (FAP) is a common activity which all Research Councils place reliance upon in relation to the use of grant funding;
- ISA260 reports from Russell Group Universities and other top ranked HEIs. To date 22 institutions have provided a return and no major errors or concerns in relation to Research Council funding have been identified.
- A letter from HEFCE providing an Annual Assurance Statement confirming that they have reviewed 24 institutions during the year and provide assurance on:
  - The financial stability of the institutions;
  - The absence of material threats to Research Council funds;
  - That HEIs work within sound governance frameworks; and
  - That they are unaware of any improper or irregular expenditure in the use of Research Council funds.
- Final Expenditure Statements submissions – each grant holder is required to submit a Final Expenditure Statement at the end of the grant. These are checked and reconciled (100%) by UK SBS. These did not raise any significant or material issues.

The FAP methodology provides assurance on the control environment in operation within Research Organisations and vouches a targeted sample of transactions to confirm compliance with grant terms and conditions. The results (ie very low level of current and historic errors identified) are for all Councils consistent with our key assertion regarding the robustness of the overall Research Council funding system. In his report the Head of Funding Assurance provides 'Moderate Assurance' based upon the programme of work undertaken in 2015-16 and the previous 2 years. In 2015-16 the main outcomes of this programme were:

- 20 assurance assignments covering 69 EPSRC grants.
- c£72.9m of EPSRC expenditure reviewed.
- ineligible expenditure of £4,101 identified on the funding reviewed in 2015-16. No payments in advance of need were identified.

Combined with the other layers of assurance such as the processes around grant application, approval and payment plus the independent ISA 260 audit reports for Universities (reinforced by the HEFCE framework for control of HEIs), I am able to make positive assertions around the regularity of spend by Research Organisations.

# Corporate Governance Report

## Non-SIEBEL awards/funding

Funding to Universities and Independent Research Organisations represents the major part of EPSRC non-SIEBEL-funding (£44.0m), this is covered by the assurance arrangement outlined above for SIEBEL –funding and other specific conditions and agreements. A significant amount of non-SIEBEL-funding (£19.3m) is also to BIS and BIS Partner Organisations and other Government Departments and these organisations already have a well-managed control and audit regime in accordance with *'Managing Public Money'*. No issues were identified in 2015-16.

The remaining areas include EPSRC's funding for other research contracts and individual subscriptions which are covered by specific conditions and agreements. No issues were identified in 2015-16.

Again when I reflect on the aggregation of all these sources of assurance I conclude on a strong framework that provides adequate assurance on the efficient and effective expending of public resources. In conjunction with the other Research Councils, EPSRC will be considering a programme of improvements for 2016-17 and future years.

## UK SBS Assurance

The UK SBS provides processing services in human resources, procurement, payroll, finance, grants and IT to all seven Research Councils. This includes all expenditure being approved through a process of delegated authority and monthly reporting to budget holders.

The Executive Director of UK SBS has written to me stating that the overall assurance status of UK SBS at the end of Quarter 4 was Amber with internal controls partially implemented and effective in their operation. This also reflects the position on Disaster Recovery which UK SBS have classified as Red within their own Internal Control Assurance and which is covered below.

To compensate for the weaknesses in UK SBS EPSRC has been operating a system of additional controls to identify and rectify service failings. AASG has examined this additional control system, the outcomes of which were:

- payroll – moderate assurance
- GPC & iExpenses – moderate assurance
- purchase to pay – moderate assurance
- strategic procurement – limited assurance.

The accepted recommendations in these areas will be taken forward in 2016-17.

## Cyber Security

EPSRC recognises the ongoing and increased cyber security threats and the challenges to managing them. We have a commitment to continually improve our controls, training and awareness. Whilst there have been a small number of incidents they have not resulted in data loss or been classed as high risk.

EPSRC receives IT Infrastructure services in support of common key business services from UK SBS. These are subject to governance arrangements and subject to regular audits as covered above. These arrangements allow us to continuously assess and challenge performance including the review of cyber security threats and management of security incidents. These are reported separately in the annual report.

EPSRC remains committed to assessing our cyber security controls against the Cyber Security Essentials scheme and the Cyber Security Ten Steps to identify any improvements that are required, based on the risk appetite agreed with our audit committee.

# Corporate Governance Report

## **Business Continuity and Disaster Recovery**

In 2015, the Research Councils and UK SBS collectively started a number of initiatives to mitigate the most serious risks that were faced. In this context it was recognised that the business systems employed by the Research Councils and UK SBS are currently out of support. Additionally, UK SBS is entering into a transition period over the next two years, as new business systems are implemented and UK SBS disbanded. These factors pose a significant risk to the Research Councils, which materialised with the loss of systems for a period of two weeks towards the end of 2015-16. This resulted in business continuity plans being successfully activated by UK SBS, the Research Councils and the RCUK Executive. The RCUK community has introduced a number of measures to maintain oversight of ongoing performance, including further monitoring of services, setting up a Finance Rapid Response Group and in the case of Business IT, the Research Councils have significant ICT in-house capability. UK SBS, in liaison with the Research Councils, have carried out a lessons learnt exercise for the most recent loss of service.

Although the risk of error has increased, to date there have been no material errors or omissions reported to me. The resolution of the above system issues should be seen as a positive outcome, however there will be a continued need to assess and stabilise the platform in order to minimise the risk of further disruption. EPSRC, the other Research Councils and the RCUK Executive will continue to strengthen the business continuity plans already in place, taking into account the above lessons learnt exercise.

In my role as the Chair of RCUK Executive Group, I have written to the BIS Principal Accounting Officer alerting him of the collective concerns of the Research Councils regarding the ongoing vulnerability and fragility of UK SBS systems. The BIS Accounting Officer responded on 12 May 2016. He acknowledged the issues and shared the concerns raised in the Research Council letter of 14 March 2016. He confirmed that resource and limited financial investments would be directed to address these issues in the period leading up to March 2018.

## **Future Operations**

BIS have announced that the UK SBS is to be disbanded within the next three years, which will require EPSRC to move to an alternative provider/s within that time. BIS have indicated that these provider/s will be a combination of private sector, other parts of government or retained functions within BIS organisations. UK SBS acknowledge risks to continued resilience including reliance on legacy systems, capacity and capability. The ability of UK SBS to maintain service delivery, prepare for and transfer services over the next three years will be highly dependent on capacity and capability. Decision on the BIS Shared Service Strategy and other programmes will impact on their ability to manage change and retain key skills.

## **External Audit**

The EPSRC Annual Accounts are audited by the National Audit Office, who produce an Audit Completion Report.

## **Conclusion**

The conclusion of my review is that EPSRC's overall governance, risk management and internal control structures are sound and ensure that public money is properly accounted for and used economically, efficiently and effectively. I can provide assurance that the governance and control structures in place support the achievement of EPSRC's policies, aims and objectives and that effective plans for continuous improvement are in place.

# Remuneration and Staff Report

## Remuneration Report

### Council Chair and Council Members except Chief Executive

## Unaudited Information

### Policy

The Chairman and Council members receive a letter of appointment from BIS and are not employees of the EPSRC although remuneration is made through the EPSRC payroll. The terms of appointment allow for Members to resign from office by notice in writing to the Secretary of State. Members may also be removed from office by the Secretary of State on grounds of incapacity or misbehaviour or a failure to observe the terms and conditions of appointment.

Remuneration rates for Council Chair and Council Members are the same across Research Councils. The Department for Business, Innovation and Skills (BIS) advise Research Councils of the rates they are required to pay following an annual review.

Council Chair and Council Member appointments are ministerial appointments made by the Secretary of State for BIS. The process for new appointments to the Council Chair and Council Members follows the best practice outlined in the Code of the Commissioner for Public Appointments. This is available at <http://publicappointmentscommissioner.independent.gov.uk/>. In accordance with the Code, vacancies are advertised nationally and a panel, including independent members, oversees the process. The panel reviews all applications, shortlists and interviews then makes a recommendation to the Secretary of State. Once the Secretary of State has made a final decision, an offer of appointment is issued by BIS on his behalf to the successful candidate.

Council Chair and Council Members are defined as Office Holders. They are neither employees nor civil servants. Appointments are made for four years initially with the possibility of reappointment. Appointments are non-pensionable and there is no compensation for loss of office.

As well as an honorarium in recognition of their service to EPSRC, Council Members are refunded for reasonable expenses. Members of Council who are civil servants are not entitled to receive an honorarium. The remuneration of EPSRC's Council Members and Chairman is reviewed annually by BIS.



# Remuneration and Staff Report

## Audited Information

### Remuneration

<b>Council Chair and Council Members (audited information)</b>	<b>Period Of Appointment</b>	<b>2015-16 Remuneration £000</b>	<b>2014-15 Remuneration £000</b>
Dr Paul Golby (Chair)	01-04-12 – 31-03-16	15-20	15-20
Professor Andrew Hamilton	01-04-11 – 31-03-15	-	5-10
Professor Anne Anderson	01-04-08 – 31-03-15	-	5-10
Professor John Fisher	01-04-11 – 31-03-15	-	5-10
Professor John Perkins*	01-03-12 – 31-01-15	-	-
Professor Jeremy Watson	01-04-11 – 31-03-15	-	5-10
Professor Andrew Blake	01-04-12 – 31-03-16	5-10	5-10
Professor Dame Julia King	01-04-12 – 31-03-16	5-10	5-10
Professor Sir Richard Friend	01-04-12 – 31-03-16	5-10	5-10
Professor Vernon Gibson*	01-12-12 – 30-11-16	-	-
Dr Helen Neville	01-04-13 – 31-03-17	5-10	5-10
Professor Anthony Finkelstein	01-04-13 – 31-03-17	5-10	5-10
Professor Richard Jones	01-04-13 – 31-03-17	5-10	5-10
Dr David Watson**	01-04-09 – 31-03-17	5-10	5-10
Professor Lord Ara Darzi	01-11-13 – 31-10-17	5-10	5-10
Rt Hon Baroness Pauline Neville-Jones	01-11-13 – 31-10-17	5-10	5-10
Dr Matthew Rosseinsky	23-03-15 – 22-03-19	5-10	-
Mr Jack Boyer	01-04-11 – 22-03-19	5-10	5-10
Ms Bonnie Dean	23-03-15 – 22-03-19	5-10	-
Professor Tim Jones	23-03-15 – 22-03-19	5-10	-
Professor Muffy Calder	04-04-15 – 31-03-19	5-10	-

\*Remuneration not payable as member works in the Civil Service

\*\*Chair of EPSRC Audit and Risk Assurance Committee

# Remuneration and Staff Report

## **Chief Executive and EPSRC Directors**

The remuneration of the Chief Executive of EPSRC is decided by a Remuneration Panel chaired by the BIS Director General of Knowledge and Innovation and approved by the BIS Permanent Secretary.

The performance of EPSRC Directors is assessed annually by the Directors Remuneration Committee. This Committee is chaired by the Chair of Council and other membership comprises the Chief Executive and the Chair of Audit and Risk Assurance Committee. Assessments are made using EPSRC's Staff Performance Management process taking into the account the following:

- benchmarking against comparators in other Research Councils
- annual increases agreed for other staff pay grades within EPSRC
- BIS and Government pay policy guidelines and constraints.

There is no separate Remuneration Committee that considers the pay of other members of staff. All remuneration increases are subject to a satisfactory performance assessment. The amount of any non-consolidated one-off bonus payment is determined by the level of performance rating within the year.

## Contracts of Employment

### **Chief Executive**

EPSRC's current Chief Executive is on secondment from the University of Southampton on a four year fixed term contract.

### **Directors**

All Directors are employees of the EPSRC. The Chief Executive and all Directors are subject to a notice period of three months and any compensation awarded for early termination is subject to the terms and conditions of the Research Councils' Joint Superannuation Early Severance Scheme.

### **Executive Director of RCUK**

Executive Director of Research Councils UK (RCUK) is employed by EPSRC but her remit covers all of the Research Councils and her costs are recharged accordingly.

# Remuneration and Staff Report

## Chief Executive and EPSRC Directors

Chief Executive and Directors	2015-16				2014-15			
	Salary £000	Bonus <sup>1</sup> £000	Pension Benefits* £000	Total £000	Salary £000	Bonus <sup>1</sup> £000	Pension Benefits* £000	Totals £000
Professor P Nelson <sup>2</sup> Chief Executive	140-145	10-15	23 <sup>3</sup>	175-180	140-145	-	22	160-165
Professor D Delpy Chief Executive <sup>4</sup>	-	-	-	-	-	0-5	-	0-5
Mr A Emecz <sup>5</sup> Director	-	0-5	-	0-5	40-45	0-5	52	90-95
Mr A Lewis Director	95-100	5-10	62	165-170	90-95	0-5	37	130-135
Dr L Thompson <sup>6</sup> Director	55-60	5-10	51	110-115	85-90	0-5	34	120-125
Dr N Viner <sup>7</sup> Director	30-35	-	47	75-80	-	-	-	-
Mrs H Reynolds <sup>8</sup> Executive Director RCUK	120-125	-	24	140-145	5-10	-	4	10-15

\*The value of pension benefits accrued during the year is calculated as (the real increase in pension multiplied by 20) plus (the real increase in any lump sum) less (the contributions made by the individual). The real increases exclude increases due to inflation or any increase or decreases due to a transfer of pension rights.

<sup>1</sup> Performance bonuses for 2014-2015 paid in 2015-16.

<sup>2</sup> Professor Nelson is an employee of the University of Southampton and is on secondment to EPSRC. The values shown above are the amounts reimbursed (excl Pension & NI contributions) to the University of Southampton. VAT is payable on the total amount invoiced but is not included in the figure above. Professor Nelson can also claim up to £1,200 per month to cover the costs of travel and accommodation costs between Southampton and EPSRC Head Office in Swindon.

<sup>3</sup> The pension benefit disclosure for Professor Nelson is not equivalent to the pension benefit disclosure of the other EPSRC directors, it is the re-imburement of the contributions EPSRC makes to the University of Southampton in respect of Professor Nelson's pension.

<sup>4</sup> Professor Delpy left EPSRC on 31-03-14.

<sup>5</sup> Mr Emecz was on secondment to the University of Surrey from 01-10-14 to 30-11-15. EPSRC invoiced the University of Surrey for all employment costs including an allowance of not more than £1,200 per month to cover travel expenses between EPSRC and the university. These invoices were subject to VAT. The allowance to cover travel expenses is a taxable benefit and EPSRC covers the cost of tax payable. Mr Emecz left EPSRC on 30-11-15.

<sup>6</sup> Dr Thompson left EPSRC on 31-10-2015. Her full time equivalent salary is in the salary band 90-95.

<sup>7</sup> Dr Viner became a director on 01-11-2015. His full time equivalent salary is in the salary band 75-80.

<sup>8</sup> Mrs Reynolds has been employed as Executive Director of RCUK with effect from 01-03-2015. The role is funded by EPSRC, who host RCUK.

## Remuneration and Staff Report

Reporting bodies are required to disclose the relationship between the remuneration of the highest-paid director in their organisation and the median remuneration of the organisation's workforce. The median excludes the pension benefits disclosed above.

	2015-16	2014-15*
Banded remuneration of highest paid Director (£000)	150-155	140-145
Median remuneration of EPSRC workforce (£)	31,463	29,977
Range of staff remuneration (£)	18,661-153,314	17,858-141,400
Ratio	4.85	4.75

\* restated

Salary paid in 2015-16 includes gross salary, overtime, recruitment and retention allowances, responsibility allowances and any other allowance to the extent that it is subject to UK taxation.

It does not include severance payments, re-imburement of expenses, employer pension contributions and the cash equivalent transfer value of pensions. There has been an increase to the average annual earnings (excluding bonuses) for these members of staff of 3% between 2014-15 and 2015-16.

The monetary value of benefits in kind covers any benefits provided by the employer and treated by HM Revenue and Customs as a taxable emolument. There were no benefits in kind paid to any of the EPSRC Executive in 2015-16.

In 2015-16 no employees received remuneration in excess of the highest-paid director (2014-15, 0).

Decisions on whether to award non-consolidated performance awards to Directors are made by the CEO in conjunction with the Remuneration Committee. Decisions are strictly performance based and made in accordance with Cabinet Office Guidance 'Senior Civil Service pay 2013/14' document published in March 2013 and Non-Consolidated Performance Related Pay (NCPRP) guidance set out in the Government's announcement in May 2010. Directors were awarded non-consolidated awards based on how well they achieved or exceeded their personal objectives given to them at the beginning of the appraisal period by the CEO and approved by the Remuneration Committee.

The Professional Support Unit (PSU) was created in the year 2013-14. The Head of the PSU, Mr G Raikes, is the Director responsible to each Research Council for all PSU services provided to that Council, and he reports to the CEO of each of the Councils supported by PSU. Mr Raikes' salary is paid by his employing Council (AHRC) and is disclosed in its Annual Report. A proportion of Mr Raikes' salary is recharged across the PSU Councils as part of the agreed charging process. The remuneration of the Head of PSU is determined by their employing Council's Remuneration Committee. A PSU recharge is necessary to ensure each of the Council's costs fairly reflect the services received.

# Remuneration and Staff Report

## Pension Benefits

Chief Executive and Directors	Accrued pension at pension age as at 31-03-16 and related lump sum £000	Real increase in pension and related lump sum at pension age £000	CETV at 31-03-16 £000	CETV at 31-03-15 £000	Real increase in CETV £000
Professor P Nelson Accounting Officer*	-	-	-	-	-
Mr A Emezc Director**	-	-	-	459	-
Mr A Lewis Director	35-40 plus lump sum 105-110	2.5-5 plus lump sum 7.5-10	664	561	48
Dr L Thompson Director	40-45 no lump sum	2.5-5 no lump sum	762	700	45
Mrs H Reynolds Executive Director RCUK***	40-45 plus lump sum 120-125	40-42.5 plus lump sum 122.5-125	831	4	19
Dr N Viner Director****	30-35 plus lump sum 90-95	0-2.5 plus lump sum 5-7.5	577	520	39

\* On secondment from University of Southampton from 01-04-14.

\*\* On secondment to University of Surrey from 01-10-14 to 30-11-15. Left EPSRC 30-11-15.

\*\*\* Employment commenced 02-03-15.

\*\*\*\* From 01-11-2015

## Unaudited Information

### Pension Schemes

The employees of EPSRC are automatically enrolled to the Research Councils' Pension Scheme (RCPS), which is an unfunded defined benefit scheme paid for by employee and employer contributions as well as annual grant-in-aid on a pay-as-you-go basis. The RCPS is in all respects 'by-analogy' to the Principal Civil Service Pension Scheme (PCSPS), except that the employer's contribution is determined separately. The scheme provides retirement and related benefits based on final or average emoluments. Redundancy and injury benefits are administered and funded by the Council. The scheme is administered by the Research Councils' Joint Superannuation Service (JSS) with the associated grant-in-aid managed by the Biotechnology and Biological Sciences Research Council (BBSRC).

Employees may be in one of four defined benefit scheme arrangements: either a 'final salary' scheme (Classic, Classic Plus or Premium); or a career average scheme (Nuvos). Pensions payable are increased annually in line with changes in the Consumer Prices Index (CPI). The employer contribution rate is agreed by the RCPS Board of Management on the recommendation of the scheme actuary, the Government Actuary's Department (GAD) and is set at 26.0% of pensionable pay.

## Remuneration and Staff Report

Employee contribution rates and the method for calculating the rates for the RCPS changed on 1 April 2015 through the by-analogy arrangement with the PCSPS. The new method is based on the employees 'annualised earnings', which is the actual earnings in the month multiplied by 12. The employee contribution rate is tested against the 'annualised earnings' each month with the employee paying the appropriate contribution. The rates for the period 1 April 2015 to 31 March 2016 were as follows:

<b>Annualised pensionable earnings</b>	<b>Classic % contribution rate before tax relief</b>	<b>Classic Plus, Premium &amp; Nuvos % contribution rate before tax relief</b>
Up to £15,000	3.00	4.60
£15,001 - £21,000	4.60	4.60
£21,001 - £47,000	5.45	5.45
£47,001 - £150,000	7.35	7.35
£150,001 and above	8.05	8.05

A Partnership Pension Account was made available to new staff from 1 October 2002, based on the portable Stakeholder Pension introduced by the Government in 2001. This is a defined contribution scheme. The employers pay the RCPS 0.8% of pensionable pay to cover death in service and ill health benefits. The employers pay the balance to the employee's private pension provider. The employer contribution for 2015-16 was £13,975.34 (2014-15 £720.08).

The accrued pension quoted is the pension the member is entitled to receive when they reach pension age or immediately on ceasing to be an active member of the scheme if they are already at or over pensionable age. Pensionable age is 60 for members of Classic, Classic Plus and Premium and 65 for members of Nuvos.

On 1 April 2015 PCSPS launched a new pension scheme called Alpha. This scheme is similar to the Nuvos career average scheme but with the retirement age aligned to the state pension age. RCPS cannot at present create a by analogy Alpha scheme as the legislation does not currently permit this. Reform options are currently being discussed with HM Treasury and BIS has given permission for RCPS to continue 'as is' beyond April 2015.

Further details about the Research Councils' Pension Scheme pension arrangements can be found at the website <http://jsspensions.nerc.ac.uk>

Contributions are set at a level that is expected to be sufficient to pay the required benefits falling due in the same period with future benefits earned during the current period to be paid out of future contributions. The assets of all schemes are held separately from those of EPSRC in an independently administered scheme. It is not possible to identify the EPSRC's share of the underlying assets and liabilities of any of the pension schemes. In RCPS, EPSRC has no legal or constructive obligation to pay those future benefits. Its only obligation is to pay the contributions as they fall due and if the entity ceases to employ members of RCPS, it will have no obligation to pay the benefits earned by its own employees in previous years. For this reason, RCPS is treated as a defined contribution plan as stated in International Accounting Standards on Employee Benefits (IAS 19).

# Remuneration and Staff Report

In order that the defined benefit obligations recognised in the financial statements do not differ materially from those that would be determined at the reporting date by a formal actuarial valuation, the FReM requires that the period between formal actuarial valuations shall be four years, with approximate assessments in intervening years.

Formal actuarial valuations are used to determine employer and employee contribution rates. The last actuarial valuation undertaken for the RCPS, as at 31 March 2006, was completed in 2008-09. An actuarial valuation as at 31 March 2010 was initiated but not completed due to HM Treasury suspending all public sector pension scheme valuations whilst reform policies were being developed. HM Treasury has since concluded their reform policy, which enabled the Government Actuary Department to start the process of completing a revised scheme valuation. This valuation will be as at 31 March 2012 in accordance with HM Treasury revised scheme valuation directions. The conclusion of the scheme valuation is directly linked to the reform outcomes of the RCPS. It is likely that the reform process will be complete by June 2016 and any resulting changes to contribution rates likely to be effective from April 2017.

For 2015-16, employer's contributions of £1,926k were payable to RCPS (2014-15 £1,771k) at 26% of pensionable pay for all the salary bands.

## **The Cash Equivalent Transfer Value (CETV)**

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. The CETV figures include the value of any pension benefit in another scheme or arrangement which the individual has transferred to the Research Councils' pension arrangements and for which the RCPS has received a transfer payment commensurate with the additional pension liabilities being assumed. They also include any additional pension benefit accrued to the member as a result of their purchasing additional years of pension service in the scheme at their own cost. CETVs are worked out within the guidelines and framework prescribed by the Institute and Faculty of Actuaries and do not take account of any actual or potential reduction to benefits resulting from Lifetime Allowance Tax, which may be due when pension benefits are taken.

## **The real increase in the value of the CETV**

This reflects the increase in CETV effectively funded by the employer. It does not include the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

# Remuneration and Staff Report

## Audited Information

### EPSRC Staff Report

#### Staff Numbers & Related Costs

	2015-16 £000	Represented 2014-15 £000
Wages and Salaries	8,203	7,464
Social Security Costs	560	498
Other Pension Costs	1,937	1,782
Temporary Staff	131	634
Inward Secondments	956	697
<b>Sub Total</b>	<b>11,787</b>	<b>11,075</b>
Less recoveries in respect of outward secondments	(320)	(121)
<b>Total Net Costs</b>	<b>11,467</b>	<b>10,954</b>

All of EPSRC's senior staff are paid through a formal payroll facility and arrangements are in place through HR to provide assurance that appropriate tax arrangements are in place to cover any other appointees.

The average number of full time equivalent persons employed during the year was as follows:

Staff Numbers 2015-16	2015-16		2014-15		Total	
	EPSRC	PSU	EPSRC	PSU	2015-16	2014-15
Directly employed/core staffs	207	23	194	25	230	219
Seconded in	11	-	4	-	11	4
Temporary Staff	2	-	3	-	2	3
<b>Staff Numbers</b>	<b>220</b>	<b>23</b>	<b>201</b>	<b>25</b>	<b>243</b>	<b>226</b>
Less Seconded Out	(4)	-	(2)	-	(4)	(2)
<b>Total</b>	<b>216</b>	<b>23</b>	<b>199</b>	<b>25</b>	<b>239</b>	<b>224</b>

The average number of full time equivalent persons of each gender employed during the year was as follows:



# Remuneration and Staff Report

Staff Numbers 2015-16	2015-16		2014-15		Total	
	Male	Female	Male	Female	2015-16	2014-15
Directors	2	2	2	2	4	4
Senior Managers	14	16	12	14	30	26
Other Employees	66	130	69	120	196	189
<b>Total Directly Employed/Core Staff</b>	<b>82</b>	<b>148</b>	<b>83</b>	<b>136</b>	<b>230</b>	<b>219</b>

The AHRC hosts the PSU on behalf of AHRC, EPSRC and ESRC, providing HR, Finance, Project, Reprographics and Information Services to the three Councils. The costs of the PSU are recharged to the Councils who receive a service. All new staff appointments across these functions are recruited to AHRC.

Civil Service Compensation Scheme Analysis	Compulsory Redundancies		Other Departures		Total Departures		Total Packages	
	2015-16	2014-15	2015-16	2014-15	2015-16	2014-15	2015-16 £000	2014-15 £000
<£10,000								
£10,000-£24,999								
£25,000-£49,999			1		1		42	
£50,000-£99,999								
£100,000-£149,999								
£150,000-£200,000								
<b>Total number of exit packages</b>			<b>1</b>		<b>1</b>		<b>42</b>	

## Consultancy

EPSRC spent £10k in 2015-2016. This was paid to Uber Research GMBH in respect of a Structured Classification Trial feasibility study.

## Staff Policies

### Sickness Absence

PSU HR and the Research Council management monitor staff sickness absences on an ongoing basis with all sickness absences followed up by a return to work interview in line with the harmonised Research Council Sickness Absence Policy. Short-term and long-term absences are managed on a case-by-case basis with appropriate support from an Occupational Health Physician.

# Remuneration and Staff Report

	2015-16	2014-15
Average number of staff during year	230	219
Total days lost to sickness	1,116	1,534
Average working days lost	5	7
Days lost to long term absences	217	465

Common cause of absence	2015-16	
	Days lost	%
Cough/Cold/Flu	248	22
Anxiety/Stress related	192	17
Surgery	94	8
Gastrointestinal	72	6
Headache/Migrane/Concussion	55	5
<b>Totals</b>	<b>661</b>	<b>58</b>

## Diversity and Equality

EPSRC policy on recruitment and selection is based on the Equality Act 2010 and focuses on the ability of the candidate to perform the job regardless of gender, colour, ethnic or national origin, disability, age, marital status, sexual orientation or religion. If disability should occur during employment, the EPSRC would make every effort to maintain employment and to ensure the availability of adequate retraining and career development facilities. EPSRC monitors recruitment and workforce data as part of a strategy to ensure that it delivers on its commitment to ensuring that the best potential researchers from a diverse population are attracted into research careers.

EPSRC holds 'two ticks' Positive About Disabled People status, which is awarded to employers who have made a commitment to employ, keep and develop the abilities of disabled staff. The annual review was successful and retention of the award was confirmed for a further year.

EPSRC supports the Mindful Employer initiative and is a signatory to the Charter for Employers who are positive about mental health. PSU HR attends seminars and networking events involving other organisations. The initiative indicates a positive attitude about mental health and demonstrates EPSRC's commitment to improving the working lives of its employees.

## Employee Engagement

Employee involvement in management and policy matters continues through ongoing dialogue between all colleagues within EPSRC. PSU, which was formed in 2013-14 and hosted by AHRC, continues to engage with colleagues to facilitate management and policy matters for HR, Finance, IT and Project work in support of AHRC, EPSRC and ESRC.

EPSRC continues to recognise, and consults with, the Public and Commercial Services Union and Prospect on issues relating to pay and terms and conditions of employment. Consultation takes place through the Joint Negotiation Consultative Committee meeting on a quarterly basis. During the year the move to a harmonised set of non-pay employment terms and conditions has continued.

# Remuneration and Staff Report

In 2015, EPSRC participated in the Civil Service People Survey for the fourth year and achieved an employee engagement index of 65, 4 points above the average for the Civil Service and ensuring a continued place in the upper quartile. Findings are discussed with all employees and there is a continuous dialogue to ensure that employees are engaged on issues that affect them at work.

EPSRC also participated in Investors in People (IiP) and was awarded the silver standard. EPSRC has participated in IiP for many years and views it as a valuable external measurement of employee engagement and a useful engagement tool.

## **Health and Safety**

EPSRC is a joint member of a cross-Research Council Health and Safety Committee. This Committee considers and manages health and safety for EPSRC, ESRC and AHRC, and is supported and managed by PSU HR. The Committee has developed and implemented a common health and safety policy across the three Research Councils and has a continuous programme of inspections and engagement with employees in the three Research Councils. Joint Building and Office Services continues to provide health and safety support and administration across the seven Research Councils, relating to induction of new starters, first aid and fire safety.

# Parliamentary Accountability and Audit Report

## Audited Information

### Regularity of Expenditure

During the reporting period there were no transactions that required specific treasury approval. All transactions complied with the requirements of regularity as defined by the Treasury document Managing Public Money.

### Losses and Special Payments

EPSRC has not recognised any losses or special payments in the financial year 2015-16.

### Remote Contingent Liabilities

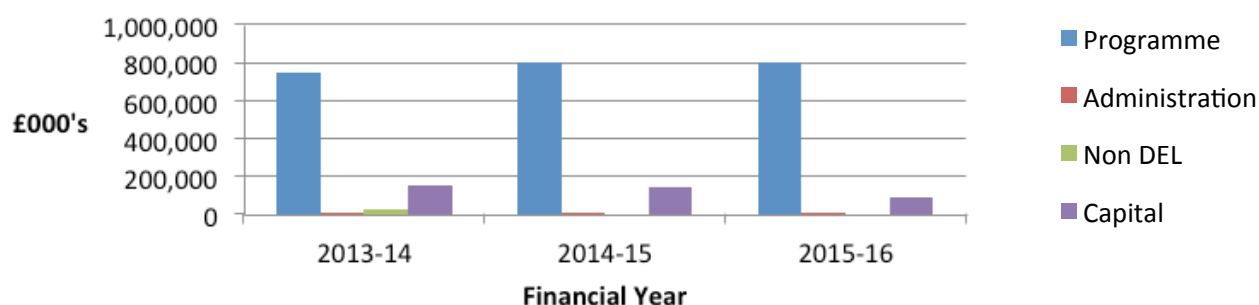
EPSRC has no contingent liabilities as at 31 March 2016.

### Long-term Expenditure Trends

The graphs highlighted in this section provide a visual representation of the critical areas that drive the performance of EPSRC. With grant in aid being determined by our sponsoring department it is vital the programme allocation element is utilised in the most effective way to ensure our medium and long term objectives are continually met.

Constraints in the administrative allocation element over the last few years have meant that it has become increasingly important to maintain high quality back-office services in the most efficient way possible. Whilst third party income is a vital source of additional funding, its volatile nature reflects the difficulty in securing such on a consistent basis. However, it is also important to recognise the value collaborative partners place on the work of EPSRC.

### Grant in Aid Allocation



# Parliamentary Accountability and Audit Report

The allocation from BIS is made up of the four components as in the graph above.

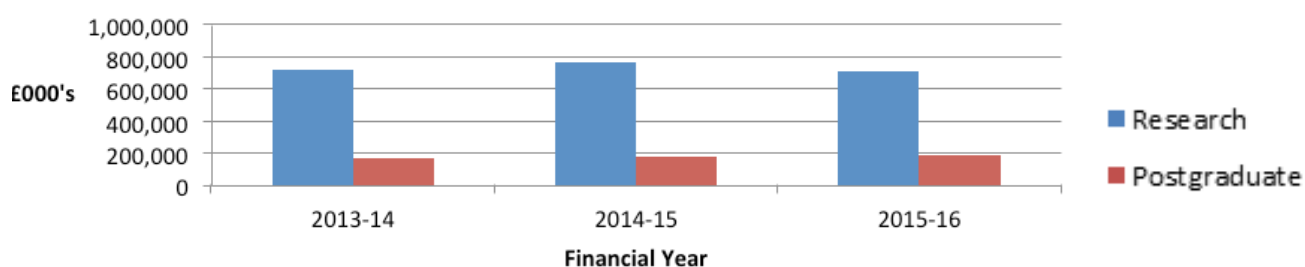
The 2015-16 DEL allocation shows a reduction of 6.2% compared to 2014-15 mainly due to the capital element.

For 2015-16 the allocation of programme to capital is 89% and 10% (for 2014-15 84% and 15%, respectively).

The allocation for administration has remained fairly constant over the last three years at 1%.

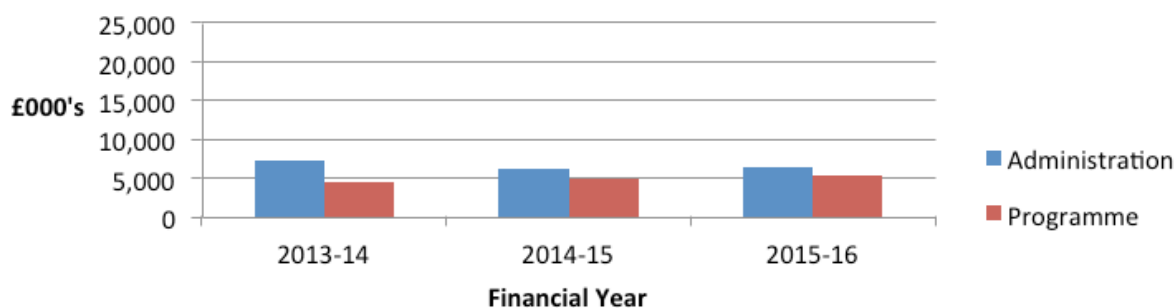
Over the last three years the average allocation for research and postgraduate training has been 81% and 19%, respectively. Also over this period the allocation levels for postgraduate training in real cash terms have increased, reflecting the importance to EPSRC in investing in cohort style PhD training.

## Gross Research & Postgraduate Expenditure



Over the last three years the average allocation for research and postgraduate training has been 81% and 19%, respectively. Also over this period the allocation levels for postgraduate training in real cash terms have increased, reflecting the importance to EPSRC in investing in cohort style PhD training.

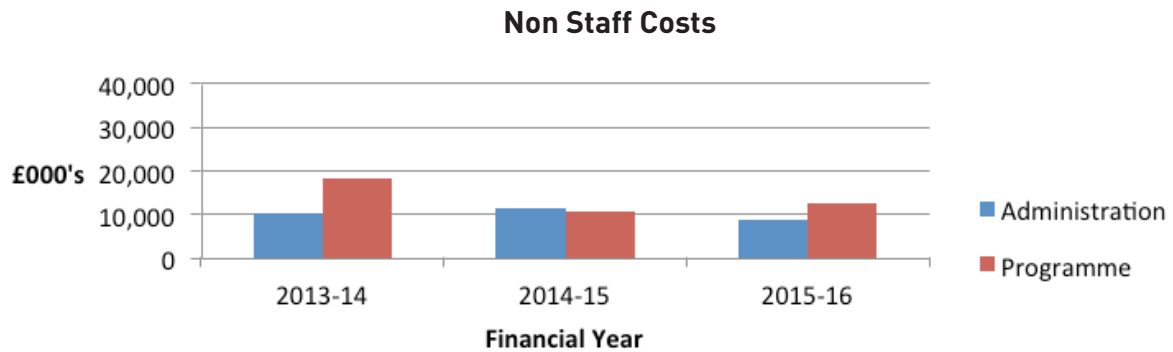
## Staff Costs



The gradual fall in staffing costs over 2013-14 and 2014-15 has been offset by higher amounts in 2015-16 due to the agreed contractual pay settlement.

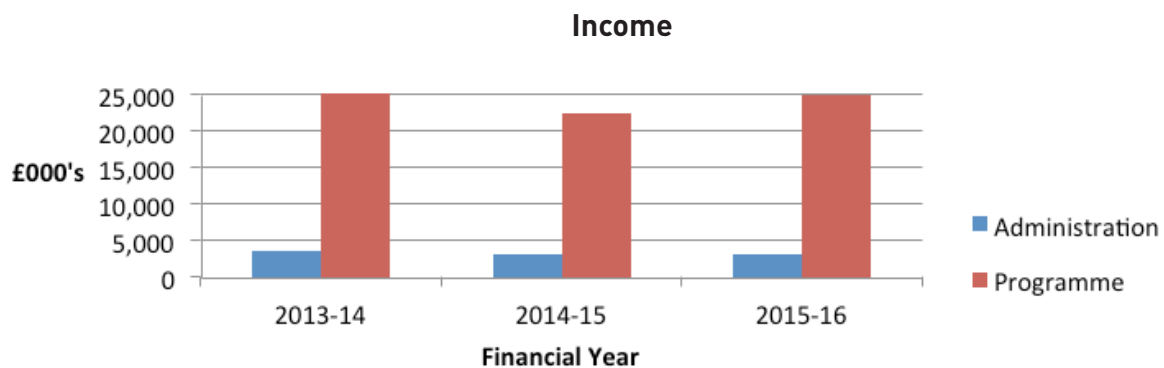
The fall between 2013-14 and 2014-15 was 5.1% whilst the increase in 2015-16 is 6.4%.

# Parliamentary Accountability and Audit Report



The graph above includes non-cash items such as depreciation and amortisation.

Over the last three years there has been an effort to reduce non-staff related expenditure whilst maintaining high quality service levels.



Between 2013-14 and 2014-15 total income decreased by 10.9%, but then increased in 2015-16 by 9.8%.

Whilst administration income has remained pretty flat, programme levels have seen a slight decrease in 2014-15, but then improving in 2015-16. This is important in helping EPSRC to continue to invest in quality research.

**Professor Philip Nelson**, Accounting Officer  
30 June 2016

# Parliamentary Accountability and Audit Report

## The Certificate and Report of the Comptroller and Audit General

I certify that I have audited the financial statements of the Engineering and Physical Sciences Research Council for the year ended 31 March 2016 under the Science and Technology Act 1965. The financial statements comprise: the Statements of Comprehensive Net Expenditure, Financial Position, Cash Flows, Changes in Taxpayers' Equity and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration and Staff Report and the Parliamentary Accountability and Audit Report that is described in that report as having been audited.

### **Respective responsibilities of the Council, Accounting Officer and Auditor**

As explained more fully in the Statement of Accounting Officer's Responsibilities, the Council and the Accounting Officer are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. My responsibility is to audit, certify and report on the financial statements in accordance with the Science and Technology Act 1965. I conducted my audit in accordance with International Standards on Auditing (UK and Ireland). Those standards require me and my staff to comply with the Auditing Practices Board's Ethical Standards for Auditors.

### **Scope of the audit of the financial statements**

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the Engineering and Physical Sciences Research Council circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the Engineering and Physical Sciences Research Council; and the overall presentation of the financial statements. In addition I read all the financial and non-financial information in the Annual Report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by me in the course of performing the audit. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my certificate.

I am required to obtain evidence sufficient to give reasonable assurance that the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

### **Opinion on regularity**

In my opinion, in all material respects the expenditure and income recorded in the financial statements have been applied to the purposes intended by Parliament and the financial transactions recorded in the financial statements conform to the authorities which govern them.

### **Opinion on financial statements**

In my opinion:

- the financial statements give a true and fair view of the state of the Engineering and Physical Sciences Research Council's affairs as at 31 March 2016 and of the net expenditure for the year then ended; and

# Parliamentary Accountability and Audit Report

- the financial statements have been properly prepared in accordance with the Science and Technology Act 1965 and Secretary of State directions issued thereunder.

## **Opinion on other matters**

In my opinion:

- the parts of the Remuneration and Staff Report and the Parliamentary Accountability and Audit Report to be audited have been properly prepared in accordance with Secretary of State directions made under the Science and Technology Act 1965; and
- the information given in the Performance Report and Accountability Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

## **Matters on which I report by exception**

I have nothing to report in respect of the following matters, which I report to you if, in my opinion:

- adequate accounting records have not been kept or returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the parts of the Remuneration and Staff Report and the Parliamentary Accountability and Audit Report to be audited are not in agreement with the accounting records and returns; or
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

## **Report**

I have no observations to make on these financial statements.

**Sir Amyas C E Morse**  
Comptroller and Auditor General  
6 July 2016

National Audit Office  
157-197 Buckingham Palace Road  
Victoria  
London SW1W 9SP



# Financial Statements

## Statement of Comprehensive Net Expenditure

For the year ended 31 March 2016

Expenditure	Note	2015-16 £000	2014-15 £000
<b>Administration</b>			
Staff Costs	3	6,467	6,128
Other Expenditure	5	6,045	7,979
Notional Service Charge	5	2,769	3,516
Operating Income	6	(3,186)	(3,258)
		<b>12,095</b>	<b>14,365</b>
<b>Programme</b>			
Staff Costs	3	5,320	4,947
Research	4a	640,330	690,124
Postgraduate Awards	4b	185,202	177,679
Energy Technologies Institute LLP	4c	8,033	10,523
UK Research Facilities	4d	17,308	13,811
International Subscriptions		590	549
Research Fellowships	4e	50,950	47,940
Other Expenditure	4f	12,532	10,856
Operating Income	6	(25,007)	(22,425)
		<b>895,258</b>	<b>934,004</b>
<b>Net Expenditure</b>		<b>907,353</b>	<b>948,369</b>
<b>Other Comprehensive Net Expenditure</b>			
Net Gain on Revaluation of Non-Current Assets		(291)	(267)
<b>Total Comprehensive Net Expenditure</b>		<b>907,062</b>	<b>948,102</b>

The notes on pages 59 to 74 form part of these accounts.

## Statement of Financial Position

As at 31 March 2016

	Note	31 March 2016 £000	31 March 2015 £000
<b>Non-Current Assets</b>			
Property, Plant and Equipment	7	21,001	30,292
Intangible Assets		219	294
<b>Total Non-Current Assets</b>		<b>21,220</b>	<b>30,586</b>
<b>Current Assets</b>			
Trade and Other Receivables	9	23,963	26,124
Cash and Cash Equivalents	10	12,652	14,001
Assets Held for Sale	9	6	-
<b>Total Current Assets</b>		<b>36,621</b>	<b>40,125</b>
<b>Total Assets</b>		<b>57,841</b>	<b>70,711</b>
<b>Current Liabilities</b>			
Trade and Other Payables	11	(39,172)	(50,311)
<b>Total Current Liabilities</b>		<b>(39,172)</b>	<b>(50,311)</b>
<b>Total Assets less Current Liabilities</b>		<b>18,669</b>	<b>20,400</b>
<b>Assets less Total Liabilities</b>		<b>18,669</b>	<b>20,400</b>
<b>Taxpayers' Equity</b>			
Revaluation Reserve		1,970	1,767
General Reserve		16,699	18,633
<b>Total Taxpayers' Equity</b>		<b>18,669</b>	<b>20,400</b>

The notes on pages 59 to 74 form part of these accounts.



**Professor Philip Nelson**, Accounting Officer  
30 June 2016

## Statement of Cashflows

For the year ended 31 March 2016

	Note	2015-16 £000	2014-15 £000
<b>Cash Flows from Operating Activities</b>			
Net Expenditure		(907,353)	(948,369)
<b>Adjustments for Non-Cash Transactions</b>			
Depreciation	7	9,573	7,489
Amortisation		91	92
Impairment		1	(131)
Decrease in Trade and Other Receivables	9	2,161	12,296
Decrease in Trade and Other Payables	11	(11,139)	(17,243)
<b>Net Cash Outflow from Operating Activities</b>		<b>(906,666)</b>	<b>(945,866)</b>
<b>Cash Flows from Investing Activities</b>			
Purchase of Property, Plant and Equipment	7	-	(9,659)
Purchase of Intangibles		(14)	-
<b>Net Cash Outflow from Investing Activities</b>		<b>(14)</b>	<b>(9,659)</b>
<b>Cash Flows from Financing Activities</b>			
Grant-in-Aid received from BIS – Revenue		808,862	802,690
Grant-in-Aid from BIS – Capital		86,700	144,400
Funding received from BIS (non-DEL)		7,000	5,000
Notional Service Charge		2,769	3,516
<b>Net Cash Flows from Financing Activities</b>		<b>905,331</b>	<b>955,606</b>
<b>Net (Decrease)/Increase in Cash and Cash Equivalents in the period</b>		<b>(1,349)</b>	<b>81</b>
Cash and Cash Equivalents at the beginning of the period	10	14,001	13,920
Cash and Cash Equivalents at the end of the period	10	12,652	14,001

The notes on pages 59 to 74 form part of these accounts.

## Statement of Changes in Taxpayers' Equity

For the year ended 31 March 2016

	Revaluation Reserve £000	General Reserve £000	Total Reserves £000
<b>Balance at 1 April 2014</b>	1,500	11,396	12,896
<b>Changes in Taxpayers Equity 2014-15</b>			
Grant-in-Aid received from BIS – Revenue	-	802,690	802,690
Funding received from BIS – Capital	-	144,400	144,400
Funding Received from BIS (Non-DEL)	-	5,000	5,000
Notional Service Charge	-	3,516	3,516
Transfer between Reserves	-	-	-
Revaluation of PPE and Intangibles	267	-	267
Net Expenditure	-	(948,369)	(948,369)
<b>Balance at 31 March 2015</b>	<b>1,767</b>	<b>18,633</b>	<b>20,400</b>
<b>Balance at 1 April 2015</b>	<b>1,767</b>	<b>18,633</b>	<b>20,400</b>
<b>Changes in Taxpayers' Equity 2015-16</b>			
Grant-in-Aid received from BIS – Revenue	-	808,862	808,862
Funding received from BIS – Capital	-	86,700	86,700
Funding Received from BIS (Non-DEL)	-	7,000	7,000
Notional Service Charge	-	2,769	2,769
Transfer between Reserves	(88)	88	-
Revaluation of PPE and Intangibles	291	-	291
Net Expenditure	-	(907,353)	(907,353)
<b>Balance at 31 March 2016</b>	<b>1,970</b>	<b>16,699</b>	<b>18,669</b>

The notes on pages 59 to 74 form part of these accounts.

# NOTES TO THE ACCOUNTS

## 1. Statement of Accounting Policies

### a. Basis of Accounting and Accounting Convention

The Accounts have been prepared in accordance with a direction given by the Secretary of State with the approval of HM Treasury in pursuance of Section 2 (2) of the Science and Technology Act 1965.

These financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) and meet the accounting and disclosure requirements of the Companies Act 2006 and the accounting and financial reporting standards issued or adopted by the International Accounting Standards Board as interpreted for Government use by the Financial Reporting Manual (FRoM) and in so far as these requirements are appropriate. Where the FRoM permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the particular circumstances of the EPSRC for the purpose of giving a true and fair view has been selected. The particular policies adopted by the Council are described below. They have been applied consistently in dealing with items that are considered material to the accounts. There was no material departure from IFRS or FRoM in preparation of these statements.

As required by Section 393 (1) of the Companies Act 2006 the Accounting Officer has provided assurance that these statements give a true and fair view of the assets, liabilities, financial position and the comprehensive net expenditure of EPSRC.

These accounts have been prepared under the historical cost convention, modified to account for the revaluation of Non-Current Assets, where material.

The financial statements are presented in £ sterling and all values are rounded to the nearest thousand, except where indicated otherwise.

### Going Concern

These Financial Statements have been prepared on the going concern basis. Any deficit shown on the General Reserve will be extinguished over time, having regard to the resource and capital budgets to which EPSRC can be expected to have access.

Budget allocations were formally announced in March 2016 following the Comprehensive Spending Review. Confirmation of the 2016-17 allocation was received from BIS in April 2016 detailing EPSRC's ring-fenced budgets. The Research Councils have published their spending plan and priorities for 2016-20 in line with the spending review period.

The Higher Education & Research Bill received its first reading in May 2016 setting out the government's intention regarding the research councils future, with the creation of a single executive non-department public body operating at arm's length from Government – UK Research and Innovation (UKRI). The Bill states the Government will ensure the seven research discipline areas continue to have strong and autonomous leadership, and that UKRI will incorporate the functions of the seven Research Councils, Innovate UK, and HEFCE's research funding functions. The names and brands of the Research Councils and Innovate UK will be retained amongst a number of other protections.

EPSRC has no reason to believe that future funding from BIS will not be forthcoming. Therefore the accounts have been prepared on a going concern basis.

### Adoption of Standards and Changes in Policy

All International Financial Reporting Standards, Interpretations and Amendments to published standards, effective at 31 March 2016, have been adopted in these financial statements, taking into account the specific interpretations and adaptations included in the FRoM.

**IFRS 9** Financial Instruments (effective for periods beginning on or after 1 January 2015) – IFRS 9 is a replacement for IAS 39 and introduced new requirements for the classification and measurement of financial assets.

**IFRS 13** Fair value measurement (adopted by the FReM for 2015-16) – IFRS 13 provides a single source of guidance for fair value measurement.

Simplifying and Streamlining Accounts Project (implemented by the FReM for 2015-16) – Staff-related disclosures have relocated to the Remuneration and Staff Report (page 46) in line with the guidance issued by HM Treasury. Accounting policies or disclosure notes are only required in relation to material items.

### **Effective for Future Financial Years**

The International Accounting Standards Board (IASB) and the International Financial Reporting Interpretations Committee (IFRIC) issued certain standards and interpretations with an effective date after the date of these financial statements. Where these changes are relevant to EPSRC's circumstances they are listed below and will be adopted at the effective date. They have not been adopted early and their adoption is not expected to have a material impact on EPSRC's reported income or net assets in the period of adoption.

**IAS 1** Presentation of Financial Statements (effective for periods beginning on or after 1 January 2016) – The amendment clarifies that information should not be obscured by aggregating or providing immaterial information. Materiality consideration applies to all part of the financial statements and even when a standard requires a specific disclosure.

**IAS 7** Statement of cashflows (effective for periods beginning on or after 1 January 2016) – Requires that the following changes in liabilities should be disclosed within financing activities: (i) changes from financing cash flows; (ii) changes arising from obtaining or losing control of subsidiaries or other businesses; (iii) the effect of changes in foreign exchange rates; (iv) changes in fair values; and (v) other changes.

**IAS 16** Property, Plant and Equipment (effective for periods on or after 1 January 2016) – The amendment to IAS 16 provides additional guidance on how the depreciation of property, plant and equipment should be calculated.

**IAS 38** Intangible assets (effective for periods on or after 1 January 2016) – The amendment to IAS 38 provides additional guidance on how the amortisation of intangible assets should be calculated.

EPSRC is not expecting any significant impact to future financial statements from the accounting standards that are newly issued and are not yet effective.

### **b. Financing and Income**

The FReM requires Non-Departmental Public Bodies to account for Grant-in-Aid as financing. In the EPSRC's case this includes Grant-in-Aid from the Department for Business, Innovation and Skills.

Monies from other Research Councils for co-financing of various Grant programmes are recognised as income when goods or services are delivered and title has passed, and charged to the Statement of Comprehensive Net Expenditure in the accounting period in which the goods or services are rendered.

The Council receives funding for collaborative projects to support EPSRC's research. The majority of this funding is received from the UK Public Sector. Some of the funding may involve payment for the collaboration a number of years in advance of the accounting period to which it relates. Where there is a variance between work done in the accounting period and received funding, income will be deferred where the contract or agreement allows.

### c. Administration and Programme Expenditure

The Statement of Comprehensive Net Expenditure is analysed between Administration and Programme income and expenditure. The classification of expenditure and income as an Administration or Programme follows the definition set by the Consolidated Budgetary Guidance. Administration budgets cover the costs of all central government administration other than the costs of direct frontline service provision. Activities that are directly associated with frontline service delivery are considered to be Programme. In practice Administration budgets include activities such as provision of policy advice, business support services, back-office administration, advice on and administration of grant programmes, technical or scientific support, and the work of the Government's Regional Offices.

### d. Property, Plant and Equipment (PPE)

Capital expenditure in PPE includes the purchase of IT equipment, office equipment, fixtures and fittings, construction and service projects, equipment and land and buildings valued at £10,000 or more.

PPE are included at cost or valuation. The basis of valuation is Open Market Value for existing use where this can be established, otherwise Current Depreciated Replacement Cost. A full month's depreciation is charged in the month of acquisition and none in the month of disposal.

Depreciation is not charged on assets under construction until the asset is brought fully into use and transferred to the appropriate asset category. They are then depreciated at the same rate as the other assets in that category.

Freehold Land	Not depreciated
Freehold Buildings	62 years
Specialist Scientific Equipment	3-15 years
IT Equipment	3 years
Archer Supercomputer	4 years
Fixtures and Fittings	5 years
Transport	4 years

Land and buildings, and major items of equipment are professionally revalued every five years at which time the remaining useful life of each revalued asset is also reassessed. The last valuation was in December 2015, conducted by GVA Grimley Ltd, using a fair value basis for the valuation. Appropriate indices are used between formal valuations.

### e. Intangible Assets

Capital expenditure on intangible assets includes the purchase of software, software licences, data sets and website development valued at £10,000 or more.

Amortisation of intangible assets is provided at rates calculated to write off the cost of each asset in equal instalments over its expected useful life as follows:

Software	3-5 years
Licences	Over length of licence
Websites	5 years

A full month's amortisation is charged in the month of acquisition and none in the month of disposal. Amortisation is not charged on assets under construction until the asset is brought fully into use and transferred to the appropriate asset category. They are then amortised at the same rate as the other assets in that category.

#### **f. Equipment Located Elsewhere**

EPSRC owns assets that are located elsewhere but are included in the Statement of Financial Position.

This figure includes the ARCHER supercomputing facility. Also a pool of scientific equipment is provided and updated by the Science and Technology Facilities Council (STFC) on behalf of the EPSRC, specifically for loan to research organisations. Wherever located, this equipment remains the property of the EPSRC and is therefore included in the Statement of Financial Position.

#### **g. Impairment of Non-Current Assets**

Impairment losses not resulting from a loss of economic value or service potential are taken to the Revaluation Reserve to the extent that there is a credit in that reserve for that asset or portfolio of assets. Impairment losses that arise from a clear consumption of economic benefit are charged to the Statement of Comprehensive Net Expenditure. Increases in value arising on revaluation are taken to the Revaluation Reserve except when they reverse an impairment for the same asset previously recognised in expenditure, in which case they are credited to the extent of the decrease previously charged there.

#### **h. Subsidiaries and Joint Arrangements**

EPSRC has no subsidiaries or interest in joint arrangements. The Alan Turing Institute (ATI) is no longer considered a subsidiary as the EPSRC does not have control of the Institute and no right to the net assets of the charity.

#### **i. Operating Segments**

The primary format used for segmental reporting is by programme expenditure as this reflects EPSRC's internal management structure and reporting to senior management. EPSRC's assets and liabilities are shared across the operating segments, and as segmental information on assets and liabilities is not used internally, disclosure is not needed.

#### **j. Ownership of Equipment or Facilities Purchased with Council Grants**

Equipment purchased by an organisation with research grant funds supplied by the EPSRC belongs to the organisation and is not included in the EPSRC's property, plant and equipment. Through the conditions of grant applied to funded organisations, the EPSRC must be informed if, during the life of the research grant, the need for the equipment diminishes substantially or it is not used for the purpose for which it was funded. The EPSRC reserves the right to determine the disposal of such equipment and to claim the proceeds of any sale.

#### **k. Grants**

Subject to the terms and conditions under which research grants are awarded, the EPSRC makes payments for grants on the basis of pre-determined quarterly profiles. Profiles are arranged, in overall terms, to reflect the rate and incidence of expenditure at the grant holding organisation. Payments are normally made in the period to which they relate, although EPSRC retains some latitude in timing. Grant expenditure is accounted for on an accruals basis to reflect the usage of grant funds on work carried out. Future commitments at the Statement of Financial Position date are disclosed in Note 12.



EPSRC's policy is to accrue for the costs of work undertaken at Higher Education Institutions which remain unpaid by EPSRC at the end of the reporting period. Prepayments are also recognised when they occur.

#### **l. Financial Instruments**

Due to the non-trading nature of its activities and the way in which the EPSRC is financed, the EPSRC is not exposed to the degree of financial risk faced by non-public sector entities. Moreover, financial instruments play a much more limited role in creating or changing risk that would be typical of listed companies. The EPSRC has very limited powers to borrow or invest surplus funds. Financial assets and liabilities are generated by day to day operational activities and are not held to change the risks facing the EPSRC in undertaking its activities.

Trade receivables are not interest bearing and are carried at original invoice amount. Provision for impairment is established when there is objective evidence that the EPSRC will not be able to collect all amounts due according to the original terms of the receivable. The amount of provision is the difference between the carrying amount and recoverable amount and is recognised in the Statement of Comprehensive Net Expenditure.

Trade and other payables are recognised in the period in which related money, goods or services are received or when a legally enforceable claim against the EPSRC is established or when the corresponding assets or expenses are recognised.

#### **m. Key Accounting Judgements**

The preparation of financial statements requires management to make estimates and assumptions. These affect the reported amounts of assets and liabilities; the disclosure of contingent assets and liabilities at the date of the financial statements; and the reported amounts of revenues and expenses during the reporting period.

On an ongoing basis, management evaluates its estimates and judgements. These estimates and judgements are based on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about the carrying value of assets and liabilities that are not readily available from other sources. Actual results may differ from these estimates under different assumptions and conditions.

Provisions are recognised when there is a present legal or constructive obligation as a result of past events, for which it is probable that an outflow of economic benefit will be required to settle the obligation, and where the amount of the obligation can be reliably estimated.

A contingent liability is disclosed where the existence of an obligation will only be confirmed by future events.

#### **n. Contingent Liabilities**

Where the time value of money is material, contingent liabilities are stated at discounted amounts and the amount separately noted. Where a potential liability does not meet the criteria outlined in the relevant standards, separate amounts are not disclosed.

#### **o. Operating Leases**

EPSRC currently holds no finance leases. Operating lease rentals are charged to the Statement of Comprehensive Net Expenditure on a straight line basis over the period of the lease.

#### **p. Foreign Currencies**

Transactions denominated in foreign currencies are translated into sterling at the rate of exchange ruling at the date of transactions. Any exchange differences arising in the ordinary course of business are taken to the Statement of Comprehensive Net Expenditure. Assets and liabilities in foreign currencies in existence at the Statement of Financial Position date are translated at the rates ruling at that date.

#### **q. Value Added Tax**

The EPSRC is a member of a VAT Group along with the other Research Councils. By registering as a group there is a single VAT registration covering all of the members. All supplies made by or to group members are deemed to be made by or to the representative member. Supplies made between group members are disregarded for VAT. There is, therefore, no VAT payable on supplies made between group members, representing a saving in administration costs.

Members of this group comprise the seven Research Councils, BIS, Higher Education Funding Council for England, Innovate UK and UK SBS Ltd.

#### **r. Pension Costs**

Retirement benefits to employees of the Council are provided by the Research Councils' Pension Scheme (RCPS) and the Prudential and Scottish Widows Pension Scheme. The expected costs of providing pensions are charged to the Statement of Comprehensive Net Expenditure so as to spread the cost over the service lives of employees in the schemes operated, in such a way that the pension cost is a substantially level percentage of current and expected future pensionable payroll. More details on pensions can be found in the Remuneration and Staff Report.

#### **s. Employee Benefits**

Employees are entitled to 30 days' annual leave per year. The annual leave year for the EPSRC runs from 1 January to 31 December. The cost of untaken employee leave at 31 March 2016 has been accrued for.

#### **t. Early Departure Costs**

The costs of early retirement or severance are charged to the Statement of Comprehensive Net Expenditure when the early departures are agreed. These costs are net of the lump sums recoverable from the pension schemes when the individual reaches normal retirement age.

#### **u. Notional SBS Charge**

Ownership of SBS transferred from the Research Councils to BIS on 6 March 2013. The SBS monthly service charge to EPSRC is now deducted from EPSRC's funding from BIS. In order to accurately reflect the cost of using SBS's services in the annual accounts the charge has been shown as a notional cost on the Statement of Comprehensive Expenditure and it has then been written back to the Income and Expenditure Reserve.

#### **v. Insurance**

In line with Government policy, EPSRC carries its own risks in respect of employment of staff, buildings, equipment etc, except where there exists a statutory requirement to insure or where commercial insurance represents better value for money. Insurance premiums are charged to the Statement of Comprehensive Net Expenditure.

## 2. Statement of operating costs by operating segment

The EPSRC's primary operating segments are Research Grants and Postgraduate Awards. Information concerning these segments is disclosed in Note 1i and expenditure is detailed in the Statement of Comprehensive Net Expenditure and broken down further in Notes 4–6.

	Research £000	Postgraduate £000	Other Programmes £000	Administration £000	2015-16 Total £000
Staff Costs	-	-	5,320	6,467	11,787
Programme	665,671	236,152	590	-	902,413
Depreciation, Amortisation and Impairment	-	-	9,421	244	9,665
Other Costs	-	-	3,111	5,801	8,912
Notional Costs	-	-	-	2,769	2,769
Income	(21,622)	(24)	(3,361)	(3,186)	(28,193)
<b>Net Expenditure</b>	<b>644,049</b>	<b>236,128</b>	<b>15,081</b>	<b>12,095</b>	<b>907,353</b>

	Research £000	Postgraduate £000	Other Programmes £000	Administration £000	2014-15 Total £000
Staff Costs	-	-	4,947	6,128	11,075
Programme	714,458	225,619	549	-	940,626
Depreciation, Amortisation and Impairment	-	-	7,119	331	7,450
Other Costs	-	-	3,737	7,648	11,385
Notional Costs	-	-	-	3,516	3,516
Income	(17,162)	(375)	(4,888)	(3,258)	(25,683)
<b>Net Expenditure</b>	<b>697,296</b>	<b>225,244</b>	<b>11,464</b>	<b>14,365</b>	<b>948,369</b>

## 3. Staff Costs

	2015-16 £000	2014-15 £000
Wages and Salaries	9,290	8,795
Social Security Costs	560	498
Other Pensions Costs	1,937	1,782
	<b>11,787</b>	<b>11,075</b>

For further information on staff costs and numbers, please see the Remuneration and Staff Report on page 46.

#### 4a. Research

	2015-16 £000	2014-15 £000
Digital Economy	18,855	22,202
Energy	108,672	120,740
Global Uncertainties	8,351	8,363
Healthcare	59,858	55,571
Living with Environmental Change	5,772	5,310
Public Engagement Programme	2,102	3,180
Manufacturing	70,887	66,644
National Capability Engineering	73,034	71,842
National Capability ICT	71,771	67,210
National Capability Infrastructure	91,241	140,728
National Capability Mathematics	22,422	23,784
National Capability Physical Sciences	84,240	92,938
Quantum Technology	19,166	9,329
The Alan Turing Institute	2,750	-
Newton	1,209	2,283
<b>Total Expenditure on Research</b>	<b>640,330</b>	<b>690,124</b>

#### 4b. Postgraduate Awards

	2015-16 £000	2014-15 £000
Collaborative Training Accounts	15,713	13,725
Doctoral Training Grants	87,672	80,952
Dorothy Hodgkin Postgraduate Awards	88	339
Centres for Doctoral Training	81,645	81,921
Other Awards	84	742
<b>Total Expenditure on Postgraduate Awards</b>	<b>185,202</b>	<b>177,679</b>

#### 4c. Energy Technologies Institute LLP

Energy Technologies Institute LLP (ETI LLP) was established in 2008 as a joint initiative between the public and private sectors to encourage research and investment in new and emerging energy technologies.

ETI LLP has been established with the aim of accelerating the development, demonstration and eventual commercial deployment of a focused portfolio of energy technologies which will increase energy efficiency, reduce greenhouse gas emissions and help EPSRC and Innovate UK (formerly the Technology Strategies Board) represent the public sector's 50% interest in the partnership. The Secretary of State for Business, Innovation and Skills is a designated member of ETI LLP but EPSRC and Innovate UK are responsible for providing the member's contributions on behalf of BIS.

EPSRC has made payments of £8,033k (2014-15 £10,523k) to ETI LLP, which have been expensed as EPSRC itself does not have an investment in ETI LLP.

#### 4d. UK Research Facilities

	2015-16 £000	2014-15 £000
<b>High Performance Computing</b>		
University of Edinburgh (HECToR)	-	5
University of Edinburgh (ARCHER)	6,074	6,056
<b>Total High Performance Computing</b>	<b>6,074</b>	<b>6,061</b>
Science and Technology Facilities Council Facilities	2,566	2,399
Other Expenditure on Research Facilities	8,668	5,351
<b>Total Expenditure on UK Research Facilities</b>	<b>17,308</b>	<b>13,811</b>

#### 4e. Research Fellowships

	2015-16 £000	2014-15 £000
<b>EPSRC Fellowships:</b>		
Early Career Fellowships	19,975	12,709
Post Doctoral Fellowships	2,430	1,574
Established	15,000	9,530
<b>Legacy Schemes:</b>		
Academic	(18)	733
Post-Doctoral	146	1,054
Career Acceleration Fellowships	7,434	12,017
Leadership Fellowships	4,889	9,307
Other Fellowships	1,094	1,016
<b>Total Expenditure on Research Fellowships</b>	<b>50,950</b>	<b>47,940</b>

#### 4f. Other Programme Expenditure

	2015-16 £000	2014-15 £000
Operating Expenses	1,877	2,257
Accommodation Costs	120	4
IT Costs	61	-
Professional Fees	360	354
Consultancy	-	373
Marketing and Advertising	309	308
Travel and Subsistence	384	441
Depreciation	9,421	7,216
Amortisation	-	34
Impairment	-	(131)
<b>Total Expenditure on Other Programme Costs</b>	<b>12,532</b>	<b>10,856</b>

## 5. Other Administration Expenditure and Notional Costs

	2015-16 £000	2014-15 £000
Operating Expenses	2,324	3,500
Accommodation Costs	1,406	1,266
IT Costs	868	1,113
Professional Fees	416	823
Consultancy	10	19
Marketing and Advertising	513	602
External Auditors Fees	68	70
Travel and Subsistence	196	255
Depreciation	152	273
Amortisation	91	58
Impairment	1	-
<b>Sub-Total</b>	<b>6,045</b>	<b>7,979</b>
SBS Notional Service Charge	2,769	3,516
<b>Total Other Administrative Costs</b>	<b>8,814</b>	<b>11,495</b>

Please note that the SBS notional service charge is made via an allocation reduction by BIS.

## 6. Operating Revenue

	2015-16 £000	2014-15 £000
RCUK Income	(4,182)	(2,461)
Income from Other Research Councils	(11,960)	(14,877)
Income from Central Government	(9,261)	(5,206)
Income from Other Bodies	(2,790)	(3,139)
<b>Total Income</b>	<b>(28,193)</b>	<b>(25,683)</b>
Co-Funding Grant Income	(21,125)	(17,118)
Income for Services Provided	(7,014)	(8,536)
EU Income	(54)	(29)
<b>Total Income</b>	<b>(28,193)</b>	<b>(25,683)</b>

## 7. Property, Plant and Equipment

	Land £000	Buildings £000	IT £000	Plant & Machinery £000	Furniture & Fittings £000	Total £000
<b>Cost or Valuation</b>						
<b>At 1 April 2015</b>	<b>1,824</b>	<b>3,680</b>	<b>32,707</b>	<b>6,155</b>	<b>1,345</b>	<b>45,711</b>
Additions	-	-	-	-	-	-
Reclassifications	-	-	-	(76)	-	(76)
Disposal	-	-	-	-	(7)	(7)
Revaluations	(280)	806	(100)	46	1	473
<b>At 31 March 2016</b>	<b>1,544</b>	<b>4,486</b>	<b>32,607</b>	<b>6,125</b>	<b>1,339</b>	<b>46,101</b>
<b>Depreciation</b>						
<b>at 1 April 2015</b>	<b>-</b>	<b>603</b>	<b>8,791</b>	<b>4,781</b>	<b>1,244</b>	<b>15,419</b>
Charge in the year	-	123	8,951	471	28	9,573
Reclassifications	-	-	-	(70)	-	(70)
Disposal	-	-	-	-	(7)	(7)
Revaluations	-	156	(8)	36	1	185
<b>At 31 March 2016</b>	<b>-</b>	<b>882</b>	<b>17,734</b>	<b>5,218</b>	<b>1,266</b>	<b>25,100</b>
<b>Net book value at 31 March 2016</b>	<b>1,544</b>	<b>3,604</b>	<b>14,873</b>	<b>907</b>	<b>73</b>	<b>21,001</b>
<b>Cost or Valuation</b>						
<b>At 1 April 2014</b>	<b>1,765</b>	<b>3,560</b>	<b>22,809</b>	<b>6,026</b>	<b>1,326</b>	<b>35,486</b>
Additions	-	-	9,610	-	49	9,659
Reclassifications	-	-	89	-	-	89
Disposal	-	-	-	-	(56)	(56)
Impairments	-	-	129	2	-	131
Revaluations	59	120	70	127	26	402
<b>At 31 March 2015</b>	<b>1,824</b>	<b>3,680</b>	<b>32,707</b>	<b>6,155</b>	<b>1,345</b>	<b>45,711</b>
<b>Depreciation</b>						
<b>At 1 April 2014</b>	<b>-</b>	<b>468</b>	<b>1,959</b>	<b>4,207</b>	<b>1,121</b>	<b>7,755</b>
Charge for year	-	116	6,820	485	157	7,578
Disposal	-	-	-	-	(56)	(56)
Revaluations	-	19	12	89	22	142
<b>At 31 March 2015</b>	<b>-</b>	<b>603</b>	<b>8,791</b>	<b>4,781</b>	<b>1,244</b>	<b>15,419</b>
<b>Net Book Value at 31 March 2015</b>	<b>1,824</b>	<b>3,077</b>	<b>23,916</b>	<b>1,374</b>	<b>101</b>	<b>30,292</b>

During 2015-16 items of plant and machinery were reclassified from non-current assets to current assets in accordance with International Financial Reporting Standard 5, with their sale expected to take place in early 2016-17.



## 8. Financial Instruments

Requirements of EPSRC are met through Grant-in-Aid provided by the Department for Business, Innovation and Skills. Financial Instruments play a more limited role in creating and managing risk than would apply to a non public sector body. The majority of Financial Instruments relate to contracts to buy non-financial items in line with EPSRC's expected purchase and usage requirements and therefore EPSRC is exposed to little credit, liquidity or market risk.

## 9. Trade Receivables and Other Current Assets

	31 March 2016	31 March 2015
Amounts falling due within 1 year:	£000	£000
Trade Receivables	6,491	12,827
Other Receivables	13	11
Prepayments	9,762	8,067
Accrued Income	7,697	5,219
Assets Held For Sale	6	-
<b>Total</b>	<b>23,969</b>	<b>26,124</b>

## 10. Cash and Cash Equivalents

	31 March 2016	31 March 2015
	£000	£000
Balance at 1 April	14,001	13,920
Net change in cash and cash equivalents balance	(1,349)	81
<b>Balance at 31 March</b>	<b>12,652</b>	<b>14,001</b>

### The following balances at 31 March were held at:

Government Banking Service and Commercial Loans	12,649	13,998
Commercial banks and cash in hand	3	3
<b>Total</b>	<b>12,652</b>	<b>14,001</b>

## 11. Trade Payables and Other Current Liabilities

	31 March 2016	31 March 2015
Amounts falling due within 1 year:	£000	£000
Creditors VAT	(39)	(56)
Trade Payables	(1,435)	(1,078)
Other Payables	(329)	(183)
Accruals	(33,424)	(45,906)
Deferred Income	(3,945)	(3,088)
<b>Total</b>	<b>(39,172)</b>	<b>(50,311)</b>

## 12. Other Financial Commitments

	31 March 2016	31 March 2015
	£000	£000
Not later than one year	760,411	817,770
Later than one year not later than five years	1,460,177	1,373,120
Later than five years	73,983	82,533
<b>Total</b>	<b>2,294,571</b>	<b>2,273,423</b>

EPSRC estimates that the future costs of research and training grants at 31 March 2016 are £2,295m. The payments to which EPSRC is committed during 2015-16, analysed by the period in which the commitment expires shown above.

### 13. Related Party Transactions

EPSRC is a Non Departmental Public Body sponsored by BIS. It complied with the International Accounting Standard on Related Party Transactions (IAS 24) as amended for Central Government use by HM Treasury.

For the purpose of IAS 24, BIS and its partner organisations are regarded as related parties. During the year, EPSRC has had various material transactions with BIS and with other entities for which BIS is regarded as their parent department, as follows: Arts and Humanities Research Council; Biotechnology and Biological Sciences Research Council; Economic and Social Research Council, Higher Education funding Council for England; Innovate UK; Medical Research Council; Natural Environment Research Council; Science and Technology Research Council; UK Space Agency; UK AEA. In addition, EPSRC has had various material transactions with the UK Shared Business Services Limited (formerly Research Councils' Shared Services Centre).

These Accounts provide disclosure of all material financial transactions in relation to the following individuals/groups:

- EPSRC senior executive staff
- EPSRC Council members
- EPSRC Audit Committee members.

Material transactions where the individual/group had a direct interest in the award concerned have been disclosed in Table A with Table B outlining financial transactions with a related party of the individual/group.

Table C outlines transactions with Institutions where Council and Audit Committee members are also members of staff or members of governing bodies. Members are considered if they are recognised as key management personnel within their employed Institution.

**Table A**

<b>Council members</b>	<b>Institution</b>	<b>Number of awards</b>	<b>Total award value £000</b>
Professor Andrew Blake	The Alan Turing Institute	1	42,000
Professor Muffy Calder	University of Glasgow	2	4,335
Professor Ara Darzi	Imperial College London	1	270
Professor Richard Friend	University of Cambridge	2	5,253
Professor Richard Jones	University of Sheffield	3	7,121
Professor Tim Jones	University of Warwick	1	3,552
Professor Matthew Rosseinsky	University of Liverpool	4	8,006

**Table B**

<b>Senior Staff Member/Council Member/Advisory Board Members</b>	<b>Related Party</b>	<b>Amount £000</b>
Dr Lesley Thompson	Spouse	1,924

**Table C**

<b>Council Member</b>	<b>Institution</b>	<b>Aggregated Amount £000</b>
Professor Richard Jones	University of Sheffield	32,338
Baroness Brown of Cambridge, Julia King	Aston University	1,999
Dr Paul Golby	Aston University	1,999
Baroness Brown of Cambridge, Julia King	National Centre for Universities and Business	324
Professor Lord Ara Darzi	Imperial College London	624
Mr Richard Dale	University of Newcastle	17,570
Ms Jane Madeley	University of Leeds	26,997
Mr Andy Nield	University of Bristol	38,602
Professor Andrew Blake	The Royal Society	778
Professor Andrew Blake	The Alan Turing Institute	2,590
Professor Tim Jones	The Alan Turing Institute	2,590
Professor Anthony Finkelstein	The Alan Turing Institute	2,590
Professor Philip Nelson	University of Southampton	34,619
Dr Lesley Thompson	Elsevier Ltd	32
Professor Anthony Finkelstein	University College London	67,173
Mr Stephen Hawker	University of Reading	3,262
Mr Stephen Hawker	Foreign & Commonwealth Office	7

#### **14. Events After the Reporting Period**

In accordance with the requirements of IAS10 'Events after the Reporting Period', post Statement of Financial Position events are considered up to the date on which the Accounts are authorised for issue, this is interpreted as the same date as the date of the Certificate of the Comptroller and Auditor General.

The result of the referendum held on 23 June 2016 was in favour of the UK leaving the European Union. This is a non-adjusting event. A reasonable estimate of the financial effect of this event cannot be made.