

# Science and Technology Facilities Council Annual Report and Accounts 2017-18

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### OVERVIEW

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#### *EXECUTIVE CHAIR'S FOREWORD*

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The Science and Technology Facilities Council's 11<sup>th</sup> and final Annual Report records yet another incredible year of contribution to national and global well-being and prosperity from our science and technology, made possible by the invaluable contribution of our academic communities and our staff.

In the past twelve months alone, among other notable achievements, STFC's staff and communities have contributed to two Nobel Prizes: for Physics awarded for the historic first detection of gravitational waves in 2015; and for Chemistry awarded for the persistence and brilliance that led to cryo-electron microscopy.

We were particularly pleased to note the global recognition of the key role played by the UK in the gravitational wave discovery and Prize: by our research community including Professor James Hough of Glasgow; by STFC's laboratory staff, who built and supported key equipment at the heart of the experiment; by our programme managers, who over more than a decade, patiently supported the effort with crucial funding and oversight; and by our communications and engagement teams who not only ensured the world saw the UK's input, but seized the opportunity to enthuse and inspire another generation.

The award of the Nobel for Chemistry to Professor Richard Henderson, from the MRC Laboratory of Molecular Biology in Cambridge, was also warmly welcomed – especially by the staff from STFC and the Diamond Light Source with whom Prof Henderson has worked to improve the technique in recent years.

We are continuing to build on the expertise that made the Nobel Prizes possible by working to deliver the next generation of global science projects.

The next ten years will see the launch of the James Webb Space Telescope, the opening of the Extremely Large Telescope in Chile and the European Spallation Source in Sweden, and the Deep Underground Neutrino Experiment in the United States. Each of these facilities represents a step-change for scientists in terms of the scope and quality of research they can produce. These major projects not only broaden our understanding of the universe, they also drive forward our technical capabilities. Properly harnessed, these can benefit not only the UK economy but society as a whole.

The Higgs Centre for Innovation in Edinburgh will open this year and will advance the proven business incubation model developed by STFC and its partners at the Harwell Campus and Sci-Tech Daresbury. Incubation-supported businesses often cross the boundaries of traditional disciplines, and the benefits of this fresh approach to supporting growth can be seen in the success of recent SMEs involved in our programmes. These include a recent ESA BIC alumni contributing to ocean monitoring and taking part in missions alongside NATO, the Royal Navy, the UK Met Office and offshore engineering industries.

We are also continuing to invest strategically in the next generation of scientists and engineers to ensure our success is sustainable. By establishing eight new PhD training centres to train the experts of the future, we will ensure the UK is well-placed in the growing field of data intensive science. Our apprenticeship scheme is also going from strength-to-strength - it has expanded to encompass new disciplines for the first time (including estates, information technology, and project management), while our existing apprentices have been recognised in local and national award schemes.

From 1 April 2018, STFC became part of UK Research and Innovation – a single organisation that aims to ensure the UK maintains its world-leading position in research and innovation. As a key component of UK Research and Innovation, the staff of STFC will ensure UK science and technology continues to deliver solutions to the global challenges facing the UK and the world.

It was a year of change, and we have been impressed with the strong engagement of STFC staff and our community in ensuring UK Research and Innovation is a success, and their commitment to delivery of unparalleled quality and scope.



**Professor Mark Thomson**

**Accounting Officer**



**Professor Sir Michael Sterling FREng**

**Chair, STFC Council**

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## STATEMENT OF STFC'S PURPOSE AND ACTIVITIES

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The Science and Technology Facilities Council (STFC) is part of UK Research and Innovation from 1 April 2018. Our research seeks to understand the Universe from the largest astronomical scale to the tiniest constituents of matter, yet creates impact on a tangible level. From clean energy to crop protection, dementia research to data-centric computing, our impact is felt across many aspects of daily life. Public investment in science supports economic growth, improves productivity and creates a highly skilled workforce. Through collaboration with industry and long term research and development (R&D) we underpin sectors that contribute billions of pounds annually to the UK economy, including space, pharmaceuticals, digital communication, microelectronics and physics-based manufacturing.

We achieve this breadth of impact by operating in three ways. Firstly, we support world-class frontier research with our university partners in particle physics, astronomy, nuclear physics, accelerator physics, and space science. Secondly, we provide access to cutting-edge, large-scale research infrastructure both in the UK and internationally. These facilities support interdisciplinary research from a range of physical and life sciences through to focused missions, such as the detection of gravitational waves. Thirdly, we help businesses thrive, promoting academic and industrial collaboration and the translation of our research to market applications across all our programmes, particularly through our national Research and Innovation Campuses.

STFC was created in 2007 as an inherently cross-disciplinary research council with a broad remit. In April 2018, STFC, along with the other six Research Councils, Innovate UK and a new organisation, Research England, was brought together to form UK Research and Innovation. The new organisation aims to ensure that the UK maintains its world leading position in research and innovation by creating a system that maximises the contribution of each of the component parts and creates the best environment for research and innovation to flourish.

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## KEY ISSUES AND RISKS AFFECTING STFC IN DELIVERING OUR OBJECTIVES

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STFC invests in a robust risk management framework to reflect the scale of our operations internationally, and involving novel and complex technologies, large-scale investments and major high-profile facilities.

At the end of the reporting period, STFC and other Research Councils transitioned from independent entities into component parts of the new UK Research and Innovation. Throughout the year, STFC staff contributed significantly to transitional arrangements for UK Research and Innovation, while ensuring ongoing delivery of world-leading science and technology that supports economic growth and improves national productivity and well-being. Staff also successfully strengthened relations with industry, academia and other stakeholders and thus ensured UK Research and Innovation was able to be formed from 1 April 2018 ready to deliver research and innovation of the highest quality.

Whilst there are no current specific control or assurance matters, there are a number of issues we would wish to highlight:

- **Staffing:** we face a challenge in attracting and retaining staff in science, engineering and technology roles
- The **changing business environment:** has introduced a number of risks around planning for UK Research and Innovation and the EU EXIT
- **Future funding and financial management:** consistent with all public sector bodies, STFC continues to work within tight financial constraints and maintains close scrutiny over its financial decisions and performance. A particular challenge is the financial volatility inherent within our cost base (e.g. foreign exchange risks, energy costs and cost of materials)
- **Cyber Security** – in common with organisations in all sectors STFC are not immune from increasingly common and sophisticated cyber threats. STFC, and in particular, IT colleagues continue to develop the cyber security governance framework in CDCAT standards
- The introduction of **General Data Protection Regulation (GDPR)** on 25 May 2018 brings about substantial changes to the existing Data Protection Act 1998. A cross-Council and Innovate UK

project, has led the implementation in line with the Act. This will continue to be a key risk due to the significant impact of non-compliance if there is an incident where we are at fault

- **Procurement** – STFC has a number of high-profile, large-scale projects and initiatives with incumbent complex procurements. Whilst STFC has acknowledged improvements in the UKSBS Ltd service delivery, we still have concerns on the efficiency of the procurement processes- particularly for specialist equipment
- STFC manages **major programmes and projects** with high value investments and complex and novel technologies and facilities. We attract and continue to bid for large-scale major investments. We recognise the need for well-informed investment decisions and demonstrating a positive return on public investment. STFC has a track record of delivery, built on a comprehensive project management framework and robust governance structures around these projects
- STFC has made significant progress recently in improving its approach to **business continuity**. In the current period of unprecedented change, it is important that business continuity arrangements are well understood

As a key component of UK Research and Innovation, STFC will continue to play a key role in providing the scientific foundation for a long-term positive impact on the United Kingdom. We will use our capabilities, working with our partners and by prioritising our activities and investments, to address some of the major challenges of the 21st Century and maintain the UK's position as the best place in the world to do science.

## STFC FINANCIAL PERFORMANCE

The financial statements have been prepared in accordance with a Direction issued by the Secretary of State for Business, Energy and Industrial Strategy (BEIS) in pursuance of Section 2(2) of the *Science and Technology Act 1965*.

The financial statements have been prepared in accordance with the *International Financial Reporting Standards (IFRS)* 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 (FRM)*. STFC's financial statements are the consolidation of the Council and its wholly owned subsidiary, STFC Innovations Limited (SIL). STFC's consolidated financial statements incorporate the Council's share of the results of its joint ventures. The results of SIL and the joint ventures are consolidated in accordance with *IFRS*.

As a non-departmental public body (NDPB), the Council is required to remain within its specific budgeted limits agreed with BEIS.

In compliance with the budgeting regime, the Council was required throughout the year to advise BEIS of its total forecast net expenditure for the year end, split between administration, programme, capital and non-cash (which includes AME) based on the requirement from HM Treasury to adhere as closely as possible to the forecast.

	Programme	Administration	Capital	Non Cash (including AME)	Total
	£000	£000	£000	£000	£000
<b>Allocation</b>	449,870	10,496	223,776	154,801	838,943
<b>Outturn</b>	446,377	10,598	224,262	128,592	809,829
<b>In Year (under)/over spend</b>	<b>(3,493)</b>	<b>102</b>	<b>486</b>	<b>(26,209)*</b>	<b>(29,114)</b>

\* *Underspend due to a £11.8m better than expected return (share of profit) in the joint venture HSIC; a reduction of £4m in planned impairment of ALICE due to some assets being transferred internally instead of being retired; the remaining difference is mainly a reduction in the normal level of depreciation due to changes in the asset base (gap in depreciation where old assets have been disposed of and replacements/new AUCs yet to be brought into use at March 2018).*

Following the necessary accounting policies the financial statements show net expenditure for the year of £682,706k. This is reconciled to the outturn position as shown below:

	Note to the financial statements	£000
<b>Net expenditure for the year as per Consolidated Statement of Comprehensive Net Expenditure (CSCNE)</b>		682,706
Property, plant and equipment (PPE) additions	6	92,017
Intangible asset additions	7	17,105
Investment additions	9.1, 10	18,405
Investment disposals	10	(404)
<b>Total Outturn</b>		<b>809,829</b>



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## EXPLANATION OF THE ADOPTION OF THE GOING CONCERN BASIS

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The Higher Education and Research Bill received Royal Assent on 27 April 2017 confirming the creation of a single executive non-departmental public body, UK Research and Innovation. Under the Higher Education and Research Act 2017, UK Research and Innovation incorporated the assets, liabilities and functions of the seven Research Councils, Innovate UK and Government's funding of research in higher education from 1 April 2018.

Confirmation of UK Research and Innovation's budget allocation for 2018-19 to 2020-21 was received from BEIS in March 2018, which shows continued funding for the functions exercised by STFC for this period.

As the functions previously provided by STFC will continue to be provided by UK Research and Innovation with the same assets and liabilities, it remains appropriate for the financial statements of STFC for the financial year ended 31 March 2018 to be prepared on a going concern basis in accordance with the Government Financial Reporting Manual issued by HM Treasury.

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## PERFORMANCE SUMMARY

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By monitoring and evaluating our impact we track our progress towards delivering our Strategy. As in previous years, we have consistently met our targets, including helping to sustain the UK's global research ranking, developing our campuses and key high-tech clusters on them, and developing our strategic partnerships. Additional targets include organisational improvement through better business processes and planning, and continuing to reduce our costs and improve efficiencies.

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## PERFORMANCE ANALYSIS

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STFC published in 2016 its *Delivery Plan for the Period 2016-2020* which includes the reporting period. Throughout 2017-18, STFC continued to deliver high quality, internationally leading, data-intensive research to provide a new understanding of the structure and evolution of the universe and to address 21st Century challenges, by:

- Delivering an excellent programme in particle physics, nuclear physics and astronomy and space science
- Providing UK academia and industry with access to international world-leading science facilities.
- Delivering new Government commitments to next-generation flagship European facilities ESS and the European X-ray Free Electron Laser (XFEL), and establishing the UK-headquarters SKA as the next big global inspirational science project

We helped realise the innovative capacity of STFC's science and research facilities to support the growth of a high-technology UK economy by:

- Developing opportunities to engage industry and other partners early in the development of technology solutions
- Increasing innovation output from our funded activities, including from funded university programmes and STFC laboratories
- Developing and implementing plans with our campus partners to deliver high value job creation and economic growth for the benefit of the UK
- Establishing the Higgs Centre for Innovation in Edinburgh

In addition, we helped to deliver a scientific and technically skilled workforce that will sustain the UK as one of the world's leading research nations and support the growth of a high technology economy by:

- Delivering a skills programme that reflects modern science and engineering requirements by coupling traditional science, technology, engineering and mathematics (STEM) disciplines with skills in software engineering, technology development and innovations in data science
- Delivering a programme that increases the number of apprentices and graduates that join STFC's programmes

- Delivering a strong programme of communications and public engagement in inspirational science to sustain the STEM skills pipeline

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## HOW STFC MANAGES PERFORMANCE

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During 2017-18 STFC continued to monitor performance on a quarterly basis according to a template defined by BEIS to be relevant across all seven Research Councils. The Dashboard includes data and commentary on financial performance, HR statistics, research funding programmes and on each of the major project funding lines and includes a 'traffic light' reporting system. In addition, it provides an update on STFC's top-level corporate risks. The Dashboard is agreed by STFC's Executive Board and submitted to BEIS after the end of each quarter. A copy of the Dashboard is also sent to STFC's Council.

We also have a range of output metrics (plus a set of indicators that are common across all Research Councils) that are reported in our annual *Impact Report*, which is available online:

<https://stfc.ukri.org/about-us/our-impacts-achievements/annual-impact-reports/>

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## THE DEVELOPMENT AND PERFORMANCE OF STFC IN 2017-18

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Progress against our strategic goals is highlighted below.

### WORLD-CLASS RESEARCH

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Our frontier research in astronomy, particle physics and nuclear physics ranks first in the world, measured by citation impact. We invested more than £100 million in 2016-17 in these areas, supporting a community of more than 1,000 academics in over 80 universities.

The ultimate recognition of the impact of gravitational wave research came with the award of the 2017 Nobel Prize for Physics to Professors Kip Thorne, Barry Barish and Rainer Weiss. The first detection in 2015 was made possible by Advanced LIGO (aLIGO), which relied heavily on initial UK capital funding and on technical expertise from UK universities and our own laboratories.

Two of STFC's UK facilities notable milestone anniversaries in 2017: CLF turned 40 years old and Diamond Light Source celebrated its 10<sup>th</sup> anniversary. CLF has delivered considerable impact during its lifetime including demonstrating high intensity, focused lasers that fit into a laboratory are possible, which could lead to significant advances in both medicine and material science. CLF developed novel, non-invasive breast cancer and bone disease diagnostic tools. Spatially Offset Raman Spectroscopy (SORS) provides a method for identifying the chemical composition underneath the surface of materials, including beneath the skin and liquids in bottles.

Since its opening in 2007, Diamond has been involved in cutting edge science, from research into the structure of medicine to the mapping of the chemical composition of meteorites. Most recently, Diamond has become home to two new state-of-the-art electron microscopes for the physical sciences, providing broad, cost-effective access to Nobel Prize-winning cryo-EM technology.

Using ISIS, scientists from the University of Manchester and East China University of Science and Technology have overcome the challenge of breaking down raw biomass without the need for chemical pre-treatment, producing record high amounts of clean liquid hydrocarbon fuel<sup>1</sup>. The use of plant material for energy could create an alternative fuel that is almost carbon neutral.

The government this year announced that two new high profile research headquarters will be established at the Harwell Campus; The Faraday Institution, formed by seven university partners, will have a budget of £65 million over four years to fund research into battery technology, while a £100 million investment in

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<sup>1</sup> <http://www.stfc.ac.uk/news/stfc-s-neutron-beam-line-contributes-to-renewable-energy-breakthrough/>; Nov 2017

the new Rosalind Franklin Institute will help to transform our understanding of disease and speed up the development of new treatments.

## WORLD-CLASS INNOVATION

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The Harwell and Sci-Tech Daresbury campuses currently host more than 300 enterprises and support more than 6,700 jobs, creating the right conditions for high-tech small and medium-sized enterprises (SMEs) to grow.

This year, tenant companies at Sci-Tech Daresbury created nearly 76 jobs, attracted £17 million of investment (£199 million since 2010) and developed 75 new products (829 since 2010). Sci-Tech Daresbury Campus contributed an estimated £163 million gross GVA11 to the UK economy in 2014-15, and supported almost 2,000 jobs across the UK. When the campus masterplan is fully realised, this could add £660 million to Sci-Tech Daresbury's gross impact by 2040.

In 2016 alone, the companies involved in our business incubation initiatives created over 70 jobs and raised £11.3 million in funding. Over half of the companies who are trading have experienced sales growth with 84% of those exporting to Europe, North America, Latin America and Asia.

Zap&Go manufacture high tech batteries that can replace slow charging lithium-ion batteries and charge devices and applications in less than 5 minutes. The company has grown from 3 employees to 20 in two and a half years, they have a growing patent portfolio and an active presence in the USA and China. Having raised £8 million through funding rounds, the company has also been awarded a grant worth €1.4 million by the EU Horizon 2020 programme to enhance the cordless prototype tools already developed.

## WORLD-CLASS SKILLS

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We play a key role in attracting young people to follow STEM careers. There were 27,675 applications to university physics courses in 2016 – around 900 fewer than in 2015 but up from 18,225 in 2007<sup>2</sup>

We are investing more than £23 million per year in postgraduate training and fellowships in particle physics, nuclear physics and astronomy, including 275 new PhD studentships, bringing the current cohort to 854.

We employ more than 60 STEM graduates on an accredited two-year structured graduate scheme, all of whom are working towards becoming qualified with a professional institution.

STFC is also upskilling its staff through a vibrant and growing apprenticeship programme, recruiting and training apprentices in engineering, project management, computing and ICT. Currently, STFC employs more than 40 apprentices. More than 100 STEM undergraduates work as paid interns at STFC for periods of three months to one year.

Further information about STFC's impact can be found in our annual Impact Report and in the Evaluation Studies that we publish on a regular basis. Recently published studies include *STFC Impact Report 2016* and *ISIS Neutron and Muon Source Lifetime Impact Report*.

## PERFORMANCE TARGETS ACHIEVED

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STFC also reports on operational performance targets in our facility operations. The following figures are for 2017-18:

Lasers at our CLF include the Octopus, Ultra, Vulcan, Artemis and Gemini systems. In 2017-18, the CLF scheduled 311 weeks of user time (including fifteen weeks of commercial access) for 102 unique experiments. The CLF recorded a user satisfaction of 95.6% and reliability of 93.5%, both against a target of 85%. The CLF availability was 28% over the agreed delivery target.

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<sup>2</sup> <https://www.ucas.com/file/84211/download?token=W5OP240q> Nov 2017

Our ISIS neutron and muon source delivered more than 830 experiments during the 2017-18 year for approximately 1,300 individual users and registered a user satisfaction of 89% over a range of 15 indicators, against a target of 85%.

At Diamond, in its 11th year of operation, 7,076 external user visits were made by academia and industry, with an additional 4,512 remote users, for a total 2,972 external user experiments.

During 2017-18, STFC ensured the UK research community had access to Europe's major research facilities: 21.8% of public access to the neutron source at the Institut Laue-Langevin (ILL) and 9.9% of public access to the European Synchrotron Radiation Source (ESRF), both in Grenoble, France.

2017 saw excellent progress across CERN's core activities, including all three pillars of its scientific programme - full exploitation of the LHC, including construction and installation of the planned LHC upgrades; delivery of a diverse research programme supporting a broad science community, including support for European participation in accelerator-based neutrino projects in the USA and Japan; and R&D towards new colliders at the energy frontier including the development of high-field superconducting magnets and novel acceleration techniques, and a diverse portfolio of future scientific projects.

The accelerator complex continued to break performance records delivering a wealth of high quality data to the LHC experiments for RUN 2 (2015-2018) and a new record of 12.3 petabytes of data was stored in just one month. The LHC experiments supported over 2,700 PhD students and produced over 330 scientific publications during the year.

CERN has continued to work closely with CERN Member States to develop its knowledge transfer (KT) activities. Its strategy and framework applicable to knowledge transfer by CERN for the benefit of medical applications was approved by the Council in June 2017 and the first radioisotopes were produced at the MEDICIS facility, including terbium 155, which is a promising radioisotope for cancer diagnosis. In 2017, five new start-ups using CERN technologies were established, bringing the total number to 23.

A CERN industry event was held in Warrington in May 2017 to inform UK companies of the forthcoming opportunities associated with the 10-year upgrade to the LHC estimated at a total cost of ~950M CHF (~£765M) and was well attended by 57 companies.

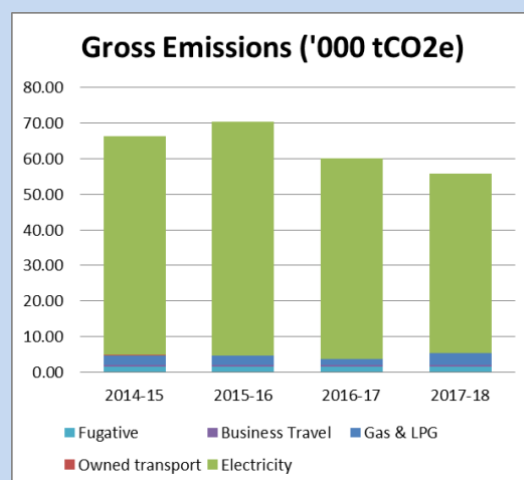
## SUSTAINABLE DEVELOPMENT

This is STFC's Sustainability Report in accordance with HM Treasury reporting guidelines for public sector sustainability reporting<sup>3</sup>. This report sets out STFC's UK environmental performance against a common basket of metrics: greenhouse gas emissions; water usage and waste disposal, and their corresponding financial data.

In line with HMT sustainability reporting guidelines STFC facilities located overseas<sup>4</sup> and STFC shareholdings in scientific facilities in the UK and overseas are excluded from the data presented. STFC recognises the limitations of the dataset and aims to continuously improve environmental reporting.

### GREENHOUSE GAS EMISSIONS

Greenhouse Gas Emissions <sup>1</sup>		2014 15	2015 16	2016 17	2017 18	
Non financial indicators ( 1000t CO <sub>2</sub> e )	Total gross emissions	66.35	70.29	60.15	55.78	
	Total net emissions	66.35	70.29	60.15	55.78	
	Gross emissions Scope 1 (direct)	Gas & LPG	2.70	2.66	1.64	3.33
		Owned transport	0.09	0.08	0.08	0.07
		Fugitive Emissions <sup>3</sup>	1.51	1.52	1.52	1.52
	Gross emissions Scope 2 & 3 (indirect)	Electricity <sup>2</sup>	61.53	65.55	56.46	50.38
Business travel		0.53	0.48	0.46	0.49	
Related Energy consumption ( million kWh )	Electricity: non-renewable	118.3	131.0	125.7	112.1	
	Electricity: renewable	0.0	0.0	0.0	0.0	
	Gas	14.58	14.42	8.86	18.07	
	LPG	0.02	0.03	0.03	0.06	
	Other	0	0	0	0	
Financial indicators ( £ million )	Expenditure on Energy	10.40	10.6	11.1	10.9	
	CRC Licensed Expenditure	1.33	1.17	0.98	0.83 circa	
	Expenditure on accredited offsets	0	0	0	0	
	Expenditure on business travel	0.95	0.92	0.99	1.00	



#### Notes to data

<sup>1</sup> Data omits a small contribution to STFC's overall greenhouse gas emissions arising from its shareholding in the UK Shared Business Service Ltd.

<sup>2</sup> STFC science facilities, for example ISIS, CLF and super computers, account for a large proportion of STFC's electricity usage. The ISIS neutron science facility accounts for two thirds of STFC electricity consumption. Variation in the number of days ISIS operates has a significant impact on STFC electricity consumption.

<sup>3</sup> Fugitive emissions added as per 2015-16 Treasury guidance.

<sup>3</sup> See HMT Guidance 2015-16 [Sustainability Reporting in the Public Sector](#)

<sup>4</sup> Key 2017-18 estimated data for STFC overseas site: ING Canarias: electricity 1.22M kWh; water 60m<sup>3</sup>; landfill 2.4tes

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## PERFORMANCE COMMENTARY

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STFC greenhouse gas emissions are dominated by the use of electricity. As a major electricity user STFC is registered with the Environment Agency (EA) administered CRC Energy Efficiency scheme and purchases allowances based on carbon emissions. The operation of the ISIS spallation neutron source at the Rutherford Appleton Laboratory (RAL) accounts for some two-thirds of all STFC electricity usage. Where the annual electrical consumption is directly affected by the number of days during which ISIS operates which fell significantly in 2017-18<sup>5</sup>, the facility is constantly looking at ways to reduce consumption. Partially offsetting this fall gas usage showed a significant increase in 2017-18 a reflection of the increase in 'heating degree days' (HDD) seen at RAL and DL due to the severe winter.

Following a continuing review by STFC's Energy Manager, further projects have been identified as 'invest to save':

- Ground source cooling on the Daresbury site; and
- Installation of local monitoring and voltage control equipment.

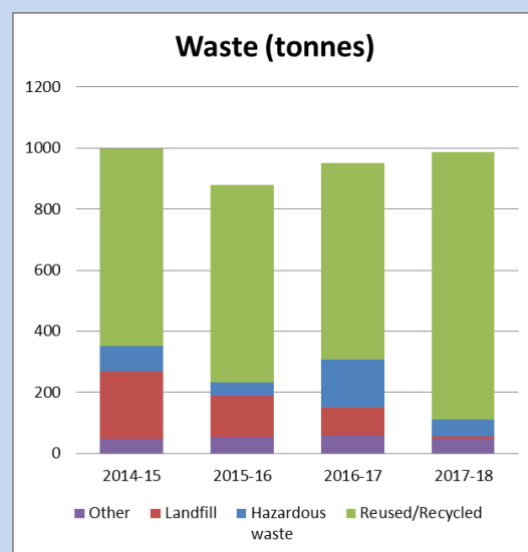
On-going building refurbishments continue to include measures to reduce energy consumption such as efficient building cladding and PIR lighting sensors.

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<sup>5</sup> ISIS operating days 2014-15 – **102**; 2015-16 – **176**; 2016-17 – **153**; 2017-18 – **109**  
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## WASTE MANAGEMENT

Waste <sup>1</sup>		2014 15	2015 16	2016 17	2017 18	
Non financial indicators (tonnes)	Total waste <sup>1</sup>	998	878	951	987	
	Hazardous waste <sup>2</sup>	Total	82	46	157	54
	Non-hazardous waste	Landfill <sup>6</sup>	220	134	90	10
		Reused/recycled <sup>3</sup>	647	644	644	876
		Composted <sup>4</sup>	25	19	25	26
		Incinerated with energy recovery	24	35	35	23
Incinerated without energy recovery	-	-	-	-		
Financial indicators (£k)	Total disposal cost	87.63	92.19	109.97	125.70	
	Hazardous waste <sup>2</sup>	55.78	36.86	72.50	29.98	
	Non-hazardous waste	Landfill <sup>7</sup>	36.62	13.83	8.04	-
		Reused/recycled <sup>3</sup>	-8.55	39.05	23.47	94.08
		Composted	3.78	2.45	4.37	1.63
		Incinerated with energy recovery	-	0.07	1.24	-
Incinerated without energy recovery	-	0	0	0		



### Notes to data

<sup>1</sup> All reported weights are based on waste management contractor calculated averages for the weight of standard containers/skips, and omits a small contribution to STFC's waste arising from its shareholding in the UK Shared Business Service Ltd.

<sup>2</sup> Hazardous waste data includes weight and costs for disposal of radioactive wastes.

<sup>3</sup> Variation in the weights of material recycled reflects volumes of scrap metals arising from the disposal or decommissioning of current or past science facilities. Variation in the cost/value of scrap metals is subject to prevailing metal prices.

<sup>4</sup> STFC sites, Rutherford Appleton and Daresbury Laboratories, recycle unused food waste from their restaurants as does the central Swindon Office.

<sup>6</sup> Excludes waste from large construction projects as there is no mechanism to extract the waste costs from the overall project costs.

<sup>7</sup> 2017-18 – New waste contractor does not split out costs for waste streams they manage.

## PERFORMANCE COMMENTARY

Whilst STFC's performance in this area is, as a result of its disparate activities, generally variable, there has been continued reduction in the proportion of waste going to landfill. This is partially due to the improved performance of its waste contractors in relation to diversion of waste from landfill.

## FINITE RESOURCE CONSUMPTION

Finite resource consumption: Water <sup>1</sup>		2014 15	2015 16	2016 17	2017 18 <sup>5</sup>	
Non financial indicators ( '000 m <sup>3</sup> )	Total consumption	144.56	153.61	127.41	123.27	
	Water consumption (office estate)	Supplied	105.46	97.51	73.99	77.83
		Abstracted	0	0	0	0
		Per FTE <sup>2</sup>	-	-	-	-
	Water consumption (non-office estate)	Supplied <sup>3</sup>	39.1	56.1	53.4	45.4
		Abstracted	0	0	0	0
Financial indicators <sup>4</sup> (£k)	Total cost	321.16	339.39	291.67	283.00	
	Water supply costs (office estate)	234.29	2315.44	169.39	178.69	
	Water supply costs (non-office estate)	88.87	123.95	122.28	104.31	

Year	Annual consumption
2014-15	144.56
2015-16	153.61
2016-17	127.41
2017-18	123.27

**Notes to data**

<sup>1</sup> Data omits a small contribution to STFC's overall water usage arising from its shareholding in the UK Shared Business Service Ltd.

<sup>2</sup> Current water metering does not allow accurate reporting of office and non-office estate consumption and therein the reporting of comparable normalised water consumption data by FTE.

<sup>3</sup> STFC science facilities account for a large proportion of water consumption - employed for equipment cooling and generating deionised water. The largest single non-office water consumer is ISIS whose data is presented.

<sup>4</sup> Total cost of water supply and disposal.

<sup>5</sup> Data for 2017-18 includes a number of estimates due to continued failure of metering equipment and billing issues.

## PERFORMANCE COMMENTARY

This year saw continued problems with water meter failures and billing issues with utility firms following the changes to the water market. STFC continues to work with its utility suppliers to ensure meters are maintained and billing is normalised.

## ENVIRONMENTAL MANAGEMENT

STFC has a published Environmental Policy supported by a documented Environmental management system which continues to be developed consistent with recognised environmental management standards such as ISO14001. STFC personnel at Polaris House, Swindon, are already working under a registered ISO14001 management system managed by the Natural Environment Research Council (NERC). The STFC Environmental Policy was reviewed and reissued by STFC CEO for 2017-18, and again supported by a focussed set of corporate environmental targets communicated to all staff:



2017-18 Environmental Objectives	
1	Minimise the environmental risk associated with the handling of hazardous liquids by reviewing all activity assessments.
2	Improve staff awareness of the utility (gas, water and electricity) usage within their buildings to promote reduction in utility usages.
3	Environmental 'Duty of Care' audits across STFC.

Progress on 2017-18 Environmental Objectives was good:

1. Analysis shows that over 75% of risk assessments were reviewed in 2017-18.
2. The STFC's Energy Manager has made good progress with implementing a monitoring system to enable data on a building level to be presented.
3. Following the mobilisation of contracts for STFC's soft services which include waste, the two service contractors were audited and given a 'Sufficient' assurance rating.

STFC's core focus will always be the delivery of access to its scientific facilities; it has continued to look for environmental improvements where possible. A special environmental edition of our weekly staff newsletter in Brief was again produced which highlighted both environmental improvements and related science:

- Helium recovery at the ISIS facility;
- 'Green' production of ammonia; and
- Work on a hydrogen detector which could be used in vehicles powered by fuel cells.



Professor Mark Thomson

Accounting Officer  
25 June 2018

## ACCOUNTABILITY REPORT

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### CORPORATE GOVERNANCE REPORT

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#### DIRECTORS' REPORT

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#### STFC COUNCIL

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Council is the governing body for STFC, and is established by the Royal Charter. Its members are appointed by the Secretary of State for BEIS. The CEO is a full member of Council. The Council was comprised of a combination of non-executive directors from academia and industry.

Professor Sir Michael Sterling DEng, CEng, FEng, FAEng(CZ), FIEE, FInstMC, CCMI, FRSA (Chair)  
Mrs Gill Ball OBE  
Dr Brian Bowsher FRSC, FInstP, FInstMC (Hon)  
Mr Gerard Connell  
Professor Karen Holford FEng, FLSW, Ceng, FIMechE  
Professor Richard Kenway OBE, FRSE, FInstP, FLSW, CPhys  
Professor Carole Mundell  
Professor Jordan Nash FInstP  
Professor David Price FGS  
Professor Tony Ryan OBE  
Mr Ian Taylor MBE  
Dr Richard Worswick FRCS

Members' register of interest (see also the note about related parties on page 85) can be found on STFC website: <https://stfc.ukri.org/files/previous-council-register-of-interests/>

#### STFC EXECUTIVE BOARD

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The Executive Board was chaired by Dr Brian Bowsher, the Chief Executive Officer (CEO) of STFC until 31 March 2018 (Professor Mark Thomson was appointed as Chief Executive and Accounting Officer and chaired from 1 April 2018 onwards). The Council appoints the membership of the Executive Board, with the exception of the CEO who is appointed by the Secretary of State for BEIS. Dr Bowsher took over the role of CEO from Professor John Womersley on 1 November 2016. The CEO was ultimately responsible to Council for the management of the organisation and the delivery of its mission.

The CEO had a specific responsibility for ensuring that Council is fully briefed on all relevant matters in a timely manner. Inter alia the Executive Board is responsible for the delivery of the following, within the strategic direction and guidance set by Council:

- The science programme
- International subscriptions and engagement
- Financial management and planning
- The economic impact agenda
- The campuses
- Outreach, external relations and communications

Membership during 2017-18 was:

Dr Brian Bowsher – CEO  
Dr Tim Bestwick – Executive Director, Business and Innovation  
Professor Grahame Blair – Executive Director, Programmes  
Mrs Diana Chaloner – Executive Director, Human Resources  
Dr Sharon Cosgrove – Executive Director, Strategy, Planning and Communications

Mr Neil Phimister – Executive Director, Finance  
Dr Andrew Taylor – Executive Director, National Laboratories  
Dr Bryony Butland – Research Infrastructure Roadmap (from January 2018)

## AUDITORS

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Internal audit was provided by the Government Internal Audit Agency (GIAA).

The accounts of the Council were audited by the Comptroller and Auditor General of the National Audit Office (NAO), under the terms of Section 2(2) of the Science and Technology Act 1965.

No non-audit work was undertaken by the NAO during 2017-18.

So far as the Accounting Officer is aware, there was no relevant audit information of which the Council's auditors were unaware. The Accounting Officer had taken all steps that he ought to have taken to make himself aware of any relevant audit information and to establish that the Council's auditors were aware of that information.

## CHARGING

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The Council has complied with the charging requirements set out in HM Treasury and Office of Public Sector Information guidance, where they are appropriate.

## FREEDOM OF INFORMATION

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During 2017-18 STFC received 37 formal requests for information under the Freedom of Information Act 2000 and responded to most requests within the required 20 day time limit. No Internal Reviews were required.

STFC publishes responses to FOI requests on its website.

The UK Research and Innovation Publication Scheme and Information Charter are available at:  
<https://stfc.ukri.org/about-us/our-purpose-and-priorities/requesting-information-from-uk-research-and-innovation/>

## HEALTH AND SAFETY

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The STFC continues to maintain a safe and healthy working environment at its laboratories.

H&S management is based on the establishment of clear line management responsibility for H&S. In addition the Chief Executive appoints Directors at each of the major STFC laboratories to maintain independent oversight of site H&S, to monitor the implementation of Council Policy, and to bring to his attention the need for any action to improve H&S performance.

H&S committees are a key component of STFC safety management system. These meet regularly on Corporate, Site and Departmental levels, and include management and employee representatives. They consider incident reports, safety statistics and provide a forum through which employee safety representatives can raise issues. Independent of the Departmental and Site safety committees, STFC Safety, Health and Environment (SHE) Committee, chaired by the Director of Corporate Services, provides a focus for reviewing and developing the overall STFC SHE Management system, approving new code launches.

STFC SHE Group including site Radiation Protection Advisers (RPAs) and Radioactive Waste Advisers (RWAs), and Occupational Health professionals monitor corporate SHE performance against a basket of input and output H&S metrics, and provide advice to line management and Health and Safety committees.

During 2017-18 STFC made further progress in developing its SHE Management Systems:

- Corporate STFC wide annual H&S (and Environmental) Improvement objectives were communicated to all staff by STFC Chief Executive helping to shape Departmental SHE improvement plans which provide the focus driving STFC SHE improvement;
- To raise awareness of STFC H&S policy and raise awareness of this key document a video message from the CEO was used in a short on-line training programme rolled out across STFC;
- During 2017-18, the SHE compliance audit programme continued to provide independent assurance to senior management of the implementation of STFC SHE management system and recommend improvements. The documented SHE Management System, SHE Codes, continue to be revised and updated to meet audit findings, organisational need, and implementation of good practise;
- Focus on contractor safety management has resulted in delivery of the new STFC bespoke 1 day Contractor Safety Management course for technical managers, the reissue of the contractor management code, and launch of site specific contractor safety management handbooks ensuring contractors are clear of STFC expectations for safety management and their role;
- Improving communication on SHE matters remains a key focus - proactively sharing learning from SHE incidents using 'What, Why, Learning (WWL)' posters, SHE Notices, the SHE website, and 'SHE Information' posters. During 2017-18 17 WWL posters and SHE Information posters were distributed across STFC sites; a major revamp of the format of STFC SHE website and the use of our successful 'SHE Fairs' to engage with staff in a novel way on SHE matters;
- There continues to be investment in STFC bespoke on-line SHE training accessed through the new STFC Learning Management System, Totara with a further 3 new BiteSize SHE Code refresher packages issued, refreshing SHE code awareness;
- During 2017-18 STFC SHE Group delivered a very extensive programme of classroom and on-line training courses based on our 'SHE Training Catalogue' of ~60 courses for staff and others working at STFC sites. The programme was developed to meet the needs of a changing staff population and regulatory requirements. Over 3700 course places were delivered on a record 47 different SHE courses during 2017-18 of which 20% were delivered on-line; and
- During 2017-18 the principal STFC laboratories, Daresbury (DL) and Rutherford Appleton (RAL), jointly received Royal Society for the Prevention of Accidents' (RoSPA's) highest accolade, 'Order of Distinction', and received for the first time a 'Commendation' in the R&D Sector awards for their health and safety management practices and overall health and safety performance.

Accident and near miss reporting and investigation continue to be an important driver of improvement in STFC SHE management system, and provide the basis of objective reporting of health and safety performance. Actively encouraged; the reporting of 'Learning Opportunities' (near misses and other

non-injury incidents) remains strong and provides essential opportunities to improve STFC safety, minimising the potential for future incidents.

STFC injury statistics for the financial years 2016-17 and 2017-18 are presented in the table below.

<b>STATISTICS</b>	<b>2017 18</b>	<b>2016 17</b>
<i>Total Injuries to Employees</i>	55	60
<i>Total Injuries to Contractors</i>	14	7
<i>Total Injuries to Users/Visitors/Tenants</i>	22	23
<b>All Injuries</b>	<b>91</b>	<b>90</b>
<i>Reportable Injuries to Employees</i>	2	2
<i>Reportable Injuries to Contractors</i>	0	1
<i>Reportable Injuries to Users/Visitors/Tenants</i>	1	1
<b>All Reportable Injuries</b>	<b>3</b>	<b>4</b>
<i>Reportable Injuries per 1000 Employees</i>	0.96	0.98

The total number of injuries to STFC staff reached a record low, which including contractors and others working at STFC sites was 91, close to the 2016-17 record. Of these injuries 3 were RIDDOR Reportable and one asbestos related contractor incident was reported as a RIDDOR Dangerous Occurrence, this is consistent with historic STFC RIDDOR performance.

When STFC was established, liability for employment-related matters and historical liabilities transferred to it from its operational sites. The buildings at these sites date from the period when asbestos was a widely used building material, primarily in lagging and insulation. Managed early removal exercises were undertaken 20-30 years ago but there are still significant quantities of asbestos in STFC buildings and, in some cases, there are small quantities of debris from previous removal programmes. STFC has strengthened its policy towards asbestos in the light of previous regulatory engagements and has commenced the active removal of asbestos from its sites where the opportunities arise.

Occupational Health teams at STFC sites, in addition to employment, hazard specific health screening and surveillance, pre-employment health screening and managing first aid teams, continued to participate in and support a range of health and wellbeing activities including: 'No smoking Day'; 'Know your Numbers' (Blood Pressure); and other services promoting mental, sexual, traveller and eye health and providing individual lifestyle advice. Hazard specific health screening has reported no instances of occupational ill health.

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## RADIOLOGICAL SAFETY

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As part of STFC's on-going commitment to managing and reducing the radiation exposure of individuals in line with 'As low As Reasonably Practicable' (ALARP) principles RPAs/RWAs provided the focus for the on-going revision and application of radiation safety codes, radiation local rules, completion of prior risk assessments, auditing the implementation of radiation safety codes and development of safe systems of work, with Radiation Protection Supervisors (RPSs) for all work involving ionising radiation hazards. During 2017-18 additional RPA/RWA resources have been recruited and trained to meet increasing regulatory oversight and workload for RPA/RWAs.

All statutory returns relating to STFC's radioactive pollution inventory and holding of radioactive materials, including HASS sources, were made to schedule to both the Environment Agency (EA) and UK Safeguards Office/European Atomic Energy Community (EURATOM). Quarterly site radiation management (and security) reports continue to provide STFC management with information and advice on radiological risks and controls.

The STFC RPS Network continues to meet and encourages communication between the RPSs, provides a forum to share information and learning and provides RPAs with an opportunity to communicate information from regulators, regulations and professional networks.

Site radon monitoring was carried out at ROE and DL and passive monitors have been deployed at RAL as part of an STFC radon monitoring programme. Further monitoring is required at Boulby Mine

and Chilbolton to complete this programme. Results from ROE and DL did not identify any areas where action is required, and the results from RAL are due in June 2018.

In preparation for the formation of UK Research and Innovation, as the new legal entity, applications were made for new Environment Agency (EA) site permits in respect of UK Research and Innovation. In January 2018 the new Ionising Radiations Regulations, 2017, (IRR17) were introduced and applications to the Health and Safety Executive (HSE) for registrations and consents were made by STFC in February 2018 and thence on behalf of all UK Research and Innovation Research Councils as a single UK Research and Innovation registrations and consents.

#### DARESBURY LABORATORY

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The DL RPA is the first point of contact for radiation issues and responsible for providing operational Health Physics support; management of radioactive materials; radiation surveys; provision of personal dosimetry; and management of Health Physics instrumentation, for the DL site. The RPA continued to provide radiation protection advice to radiation test facilities, including the continued commissioning of CLARA and DL based ESS construction programmes.

The collaboration between STFC, the Department of Nuclear Medicine at the Royal Liverpool University Hospital Trust and Liverpool University continues to provide trainee medical physicists with access to advanced medical imaging training outside the hospital environment; thus saving valuable patient time by removing the need for training to be undertaken on hospital equipment. Working closely with these, and other collaborators, allows STFC to ensure regulatory compliance at DL and influence radiation protection outside STFC.

There are currently no classified radiation workers at Daresbury Laboratory, however, ~40 non-classified workers were provided with regular personal dosimetry as part of the Laboratory's demonstration that doses are ALARP. The majority of recorded doses to non-classified workers were below minimum detectable limits.

#### RUTHERFORD APPLETON LABORATORY

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RPA advice and assistance was provided for a wide range of new experiments and projects including: new or modifications to existing ISIS Target Station 1 and 2 beam lines; the ISIS Target Station 1 project; FETS; CLF; STFC Dark Matter Facility in Boulby Mine, radioactive waste management; characterisation of radioactive waste and X-ray producing equipment critical examinations.

Disposal of legacy and operational radioactive materials and waste continues in accordance with the RAL open source and waste permit. The ISIS Facility at RAL, through its normal operation, produces small quantities of radioactive solid, liquid and gaseous wastes. The gaseous wastes, mainly tritium and short-lived radioactive nuclides, are discharged into the atmosphere via authorised and monitored ventilation stacks. The annual measured gaseous radiation levels of 130 GBq of tritiated water vapor and 6.5 TBq of other nuclides were typical of previous years and well within EA permitted annual limits of 600GBq and 100TBq respectively.

Annual disposals of solid and liquid radioactive wastes, via approved and licensed disposal routes, from RAL were in compliance with its EA Permit: 0.32 GBq tritiated water and 0.1 MBq beta/gamma to sewer; 23 MBq tritium; and 66 MBq beta/gamma solids to incineration and landfill plus 10 TBq tritium, 26 TBq beta/gamma and 0.26 alpha as spent neutron targets to Sellafield.

Landauer Inc. provides RAL with an HSE approved dosimetry service making statutory returns to both the HSE's Central Index of Dose Information and Public Health England's National Registry for Radiation Workers. Annual, calendar year, radiation doses for ISIS classified workers remained low and within its dose investigation level of 3 mSv/year and for other RAL employees and contractors below their 1 mSv/year dose investigation level.

The following table presents the results of personal radiation dose monitoring (including contractors) conducted at RAL:

Year	Dose (mSv)							Total Persons
	0.00 - 0.09	0.10 - 0.49	0.50 - 0.99	1.00 - 1.99	2.00 - 2.99	3.00 - 3.99	>3.99	
2016	356	170	10	4	0	0	0	540
2017	367	188	8	3	1	0	0	567

The dosimetry results are comparable with previous years. A review has been undertaken of classification of radiation workers at RAL with a significant reduction in the number of workers classified, due to the generally low levels of exposure.

## PERSONAL DATA RELATED INCIDENTS

During 2017-18 there were no reportable incidents involving personal data. Tables below illustrate this using the structure and format established by the Cabinet Office in 2008-09.

<p><b>Statement on information risk</b></p>	<p>STFC continues to implement the Security Policy Framework (SPF) as well as identify areas for improvement within its information security environment by implementing best practice from the likes of the Cyber Essentials Scheme, 10 Steps to Cyber Security and CESG's End User Device standards, based on the agreed STFC Information Security Risk appetite. Aspects of Information Security are independently audited and verified by the Government Internal Audit Agency (GIAA) through focussed Information Security audits throughout the year and as part of the annual HMG Security Health Check independent review process. The STFC Audit Committee also provide independent oversight of Information Security within STFC.</p> <p>On-going Information Security development work include:</p> <ul style="list-style-type: none"> <li>• Successful accreditation to Cyber Essentials standards;</li> <li>• The development of the Information Security forensic evidence process;</li> <li>• The development of UK Research and Innovation Policies in readiness for formation of UK Research and Innovation in April 18;</li> <li>• The implementation of penetration testing;</li> <li>• The development of analysis techniques to compare against other Information Security standards;</li> <li>• Gradual reduction of externally facing systems in STFC;</li> <li>• Implementation of next generation anti-malware/anti-ransomware on Windows systems.</li> <li>• Ongoing development of System Centre Configuration Manager (SCCM) to patch non-Microsoft applications on Windows devices.</li> <li>• Implementation of an internal vulnerability scanning solution.</li> <li>• Expansion of the Security Information and Event Monitoring system to monitor an expanding array of critical STFC systems.</li> </ul> <p>The STFC has arrangements in place to monitor and assess its information risks and will continue to identify and address any weaknesses and ensure continuous improvements of its systems.</p> <p>STFC's successful accreditation to Cyber Essentials in May 2017 illustrated the commitment and collaboration between all STFC Departments to improve information security standards within all areas of STFC. Further work will continue in STFC during 2018-19 to analyse and judge STFCs IT infrastructure, practices and process against other Information Security standards, such as ISO27001, to see if further Information Security changes are required within STFC.</p>
<p><b>Further action on information risk</b></p>	<ul style="list-style-type: none"> <li>• STFC are committed to continue strengthening the following information risk areas:             <ul style="list-style-type: none"> <li>○ Further strengthening appropriate information security and data protection requirements within relevant contracts</li> <li>○ Further expanding regular information security compliance checks of external service providers/processors</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>○ Further improving the lifecycle management of personal data</li> <li>○ Further embedding regular checks and updates of web based application coding</li> </ul>
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**TABLE 1: SUMMARY OF OFFICIAL PERSONAL DATA RELATED INCIDENTS FORMALLY REPORTED TO THE INFORMATION COMMISSIONER’S OFFICE IN 2017-18**

Date of incident (month)	Nature of incident	Nature of data involved	Number of people potentially affected	Notification steps
N/A				

Incidents deemed by the Data Controller (STFC) not serious enough to fall within the criteria for report to the Information Commissioner’s Office or BEIS but recorded centrally within STFC are set out in Table 2 below. Small, localised incidents that do not involve STFC personal or sensitive data are not cited in these figures.

**TABLE 2: SUMMARY OF OTHER OFFICIAL PERSONAL DATA RELATED INCIDENTS IN 2017-18**

Category	Nature of incident	Total
<b>I</b>	Loss of inadequately protected electronic equipment, devices or paper documents from secured Government premises	NIL
<b>II</b>	Loss of inadequately protected electronic equipment, devices or paper documents from outside secured Government premises	NIL
<b>III</b>	Insecure disposal of inadequately protected electronic equipment, devices or paper documents	NIL
<b>IV</b>	Unauthorised disclosure	6
<b>V</b>	Other	0

**Table 3: YEAR-ON-YEAR TOTAL NUMBERS OF OFFICIAL PERSONAL DATA RELATED INCIDENTS PRIOR TO 2017-18**

Total number of protected personal data related incidents formally reported to the Information Commissioner's Office, by category number.							Total number of other protected personal data related incidents by category number.						
	I	II	III	IV	V	Total		I	II	III	IV	V	Total
2017-18	0	0	0	0	0	0	2017-18	0	0	0	6	0	6
2016-17	0	0	0	0	2	2	2016-17	0	0	0	7	4	11
2015-16	0	0	0	0	0	0	2015-16	0	0	0	5	2	7
2014-15	0	1	0	0	0	1	2014-15	0	0	0	2	7	9
2013-14	0	0	0	0	0	0	2013-14	0	0	0	4	0	4
2012-13	0	0	0	0	0	0	2012-13	0	0	0	0	0	0

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## STATEMENT OF THE ACCOUNTING OFFICER'S RESPONSIBILITIES

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Under Section 2(2) of the Science and Technology Act 1965, the Council is required to prepare a statement of accounts for each financial year in the form and on the basis directed by the Secretary of State for Business, Energy and Industrial Strategy with the consent of the Treasury. The accounts are prepared on an accruals basis and must show a true and fair view of the Council's state of affairs at the year end and of its income and expenditure, recognised gains and losses 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 (FReM)* and in particular to:

- Observe the Accounts Direction issued by the Secretary of State for Business, Energy and Industrial Strategy, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis.
- Make judgements and estimates on a reasonable basis.
- State whether applicable accounting standards as set out in the *FReM* have been followed and disclose and explain any material departures in the financial statements.
- Prepare the financial statements on the going concern basis.

The Secretary of State for BEIS has designated the Chief Executive of STFC as Accounting Officer of STFC. 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 the keeping of proper records and for safeguarding STFC's assets are set out in '*Managing Public Money*'.

The Accounting Officer has taken all reasonable steps to ensure that he is aware of any relevant audit information and to ensure that the Council's auditors are aware of that information. As far as the Accounting Officer is aware, there is no relevant audit information of which the Council's auditors are unaware.

The Accounting Officer has taken all reasonable steps to ensure that the annual report and accounts as a whole is fair, balanced and understandable and has taken personal responsibility for the annual report and accounts and the judgements required for determining that it is fair, balanced and understandable.

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## GOVERNANCE STATEMENT

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### SCOPE OF RESPONSIBILITY

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As Accounting Officer, I have personal responsibility for maintaining a sound system of internal control that supports the achievement of STFC's policies, aims and objectives. I ensure that STFC operates effectively, to a high standard of probity and safeguards the public funds and assets.

### THE PURPOSE OF THE GOVERNANCE STATEMENT

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It is fundamental to my Accounting Officer's responsibilities to manage and control the resources in my charge. This Governance Statement is informed by the critical activities that I rely upon to maintain good stewardship over STFC activities. It supplements the accounts, providing a sense of STFC's performance; and of how successfully we cope with the challenges we face now and into the future.

### THE ORGANISATION'S GOVERNANCE FRAMEWORK

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As an independent non-departmental public body, STFC is accountable through Parliament for the funds it expends. Our mission is set out in the Royal Charter granted to us by HM Queen Elizabeth II. STFC's relationship and lines of accountability with BEIS are defined through a Management Statement and Financial Memorandum, which are subject to periodic review. STFC is compliant with the 'Corporate Governance in central government departments – Code of Practice (July 2011)'.

In April 2018, STFC formally became part of the UK Research and Innovation and operates within the UK Research and Innovation governance framework.

### COUNCIL

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The role of Council as the most senior body is set out in the Management Statement and its terms of reference. The Council is appointed by the Secretary of State for Business, Energy and Industrial Strategy. Council membership is reflective of our stakeholder base with representation from academia, public service and industry.

Council has a critical role in support of the CEO as Accounting Officer for all aspects of STFC's affairs, and specific responsibility for the following:

- Determining the overall strategic direction of STFC,
- Long term financial planning including the 10 Year Financial Plan
- The Annual Report & Accounts
- The Corporate Risk Register
- Ensuring probity and efficiency of governance
- Overseeing high impact and/or high risk decisions, including approval and monitoring of major programmes and projects
- Overseeing key relationships with Government, partner organisations and the community.

Council meets bi-monthly and is supported by its sub-groups who are consulted and provide advice in specific areas of business:

- Audit Committee – governance, control and risk management
- Science Board – scientific strategy
- Finance Committee – major new investments and monitoring progress
- Remuneration Committee – senior staff remuneration
- Innovation Advisory Board - STFC's existing and future innovation programme
- Skills and Engagement Advisory Board - strategic overview of skills programme

- Ethics Committee – advisory committee to Executive Board on ethical standards and issues.

All committee members and staff are required to declare any potential conflicts of interests promptly and at the commencement of each meeting to ensure that decisions being taken have been concluded on a fair and equal basis. A register of Council Members' private, professional and commercial interests is maintained by the Council.

Council members carry out an annual self-assessment exercise and continue to seek to improve their performance based on the outcome of this exercise. In the current change environment toward UK Research and Innovation there have been difficulties in recruiting members and retaining an appropriate balance of experience. This has affected the succession planning of Council members.

Non Executive Attendance	Council	Audit Committee
Professor Sir Michael Sterling FEng (Council Chair)	6	
Dr Brian Bowsher (CEO)	6	
Mrs Gill Ball OBE (Audit Committee Chair)	6	5/5
Mr Gerard Connell	5	4/5
Professor David Price FGS	4	
Mr Ian Taylor	6	
Dr Richard Worswick	6	
Professor Carole Mundell	5	
Professor Jordan Nash	4	
Professor Richard Kenway	6	
Professor Karen Holford	5	
Professor Tony Ryan	4	
Mr David Noble (Independent Advisor)		4/5
Mrs Angela Marshall (Independent Advisor)		5/5

## AUDIT COMMITTEE

The STFC Audit Committee supports the Council and Chief Executive in matters of governance, risk and control. Audit Committee undertakes periodic reviews of its performance reflected in an Annual Report to Council. The key items of discussion include:

- UK SBS Ltd;
- Partner Organisations;
- Cyber Security;
- Risk Management;
- Safety, Health & Environment;
- The Funding Assurance Programme;
- External audit reports; and
- Internal audit reports and implementation of recommendations.

The STFC Audit Committee has reviewed its activities over the year and provided a handover report to the UK Research and Innovation Audit, Risk, Assurance and Performance Committee (ARAPC).

## EXECUTIVE BOARD (EB)

Executive Board (EB) is STFC's principal executive decision-making body with responsibility for supporting and challenging the Chief Executive on strategic planning and decision-making and for the successful implementation of the Delivery Plan.

EB continuously reviews its remit and performance. EB acts as a cohesive unit focused on the key issues and risks.

## THE RISK AND INTERNAL CONTROL FRAMEWORK

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The STFC stewardship framework, including risk management, is reflective of an organisation that operates on an international scale with novel and complex technologies, large-scale investments and major high profile facilities. The stewardship framework is built on HM Treasury's 'Three Lines of Defence' including:

**Operational control** through clear direction on strategies, plans, policies and clear delegation of authority;

**Management assurance** through embedded oversight and review activities that continually challenge our priorities, performance and control; and

**Independent assurance** (including internal audit and funding assurance) that reviews the first two lines of defence including performance, compliance and effectiveness of controls.

Within the management assurance processes, risk reviews are carried out on a rolling basis and reported to EB, Audit Committee and Council. Risk registers (Corporate and Departmental) are integrated within the Risk & Assurance Management System and risk assessments are embedded within key decision making processes.

Executive and National Laboratory Directors are required to carry out a risk review and include a statement on significant matters within 'Stewardship Statements'. Stewardship Statements are also required for key business processes. Outcomes from reviews of the stewardship framework are reported to Executive Board and Audit Committee.

The key risks as reflected in STFC Corporate Risk Register are:

- Staffing
- EU Exit
- Business Continuity Management
- Government Reviews & Change
- Square Kilometre Array (SKA)
- Financial Planning & Management
- Procurement
- Capital Projects
- Cyber Security
- Health & Safety
- Future Funding
- Campus Developments
- Hartree Centre IROR programme
- European Spallation Source (ESS)

All of these risks are assessed as inherently high. The majority of these risks have been managed down to a lower and tolerable risk level. Those risks that remain at a high level of residual risk are reflected in the significant issues later in this statement.

## REVIEW OF EFFECTIVENESS

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As Accounting Officer I have been advised of my responsibilities and accountabilities. In the following paragraphs I describe some of conclusions from the stewardship framework described above and highlight a number of significant issues.

### Internal Audit

The Director of Internal Audit (DIA) has provided an overall opinion of 'Moderate Assurance' on the overall adequacy and effectiveness of STFC's framework of governance, risk management and control. This reflects a generally positive control environment but some improvements are required to enhance the adequacy and effectiveness of the framework of Governance, Risk Management and Control.

GIAA identified in the six-limited assurance opinions for cross-council audit reports. Specifically:

- **Transfer of assets, liabilities and regulatory permissions to UK Research and Innovation:** A project management approach was not taken which would have strengthened the likelihood of success for the process overall. We found that the Research Councils had struggled to secure sufficient resources and this was exacerbated by uncertainty of direction from the UK Research and Innovation Programme. Further observations were raised over the ambiguity of roles and responsibilities as well as weaknesses in the engagement by the Programme with the Research Councils and wider stakeholders.
- **Compliance with Harmonised Financial Policies and Procedures:** For STFC there were outstanding actions relating to non-current assets, purchase to pay, general ledger journals and general ledger reconciliation.
- **Change Management: UK Research and Innovation Digital and Technology Project (Phase 1):** Limited assurance was provided over project initiation, the business case and the budget, the function of the project board, communications, resourcing and delivery.
- **Change Management: RCUK Digital and Technology Project (Phase 2):** Unsatisfactory assurance was provided over the business case and budget. Limited assurance was provided over project initiation, stakeholders and communications, project planning, resourcing and delivery.
- **General Data Protection Regulation (GDPR):** Implementation Project (Phase 3): The audit was a readiness assessment reflecting on progress made by the project. The project has been operating within an effective governance framework. However, limited assurance was provided over risk management and activity planning and scoping.
- **Retained Function Assurance: GPC and iExpenses:** There was significant non-compliance identified in our review of GPC and iExpenses transactions. Testing of GPC transactions found potential circumvention of authorisation limits. Testing of iExpenses found evidence of non-compliance with T&S policy such as incomplete supporting documentation for a claim or manager approving expenditure not covered by the policy.

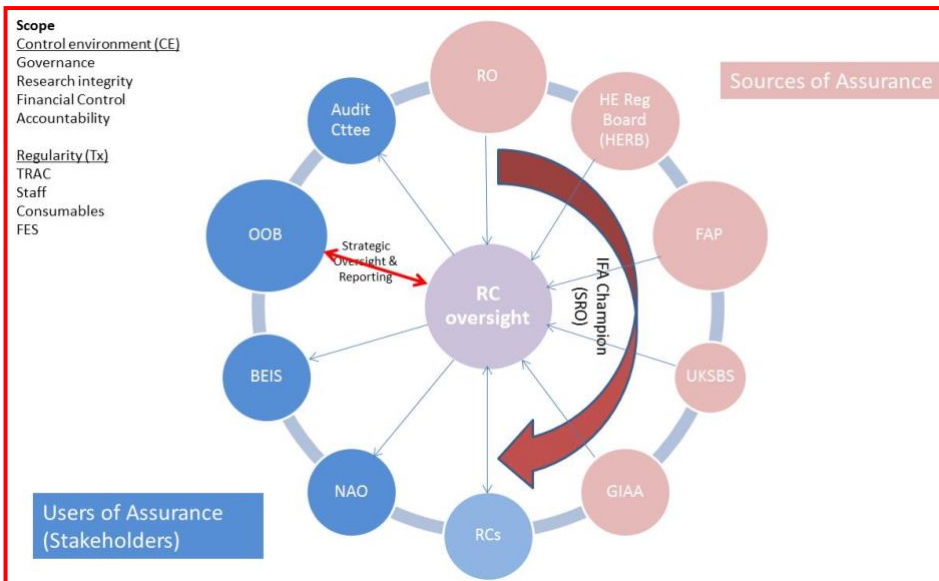
## FUNDING ASSURANCE

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Across the RCUK community research, funding totals £2.9bn of which £447.4m relates to STFC. The funding landscape has two major funding streams: 1. Grants administered through the Siebel system c£135.8m and awarded to eligible Research Organisations (ROs); 2. Funding distributed outside the Siebel system c£311.6 including Strategic partnerships.

The Funding Assurance Working Group (FAWG) has continued to review the Integrated Funding Assurance (IFA) framework and improve the approach to IFA. This framework is predicated on establishing appropriate accountability within the Research Organisation in receipt of funding and collating assurance from a range of sources (see pink in Figure 1) for key stakeholders (see blue in Figure 1).

Figure 1: IFA Framework



### Siebel Grants

The assurance provided through this framework indicates a very low level of current and historic errors for all Councils. In his report, SRO for funding assurance provides Moderate Assurance based upon the programme of work undertaken. Councils have made good progress during the year and will continue to make improvements across the IFA framework. UK Research and Innovation will take the 2018-19 plan forward under the guidance of the Deputy Director of Governance, Assurance, Risk and Information (GARI) and the Head of Assurance.

Some of the key changes during the year have been:

- Amendments to the grant terms and conditions – to provide clarity on expectations relating to due diligence and assurance,
- Auditing of UK research organisations approach to due diligence and assurance,
- Development of draft International funding assurance policy, framework and process,
- Increased resources for funding assurance team, and
- Further development of the processes relating to GCRF.

The International Assurance sub-group, (including the FA team) has continued to develop and refine the approach to due diligence and assurance for overseas funding.

In addition to the Research Councils demonstration of compliance to the Cabinet Office Minimum Grant Standards in 2017, they have also been taking part in the Grants Accelerator work. Data has been provided evidencing the Councils overall self-scoring rates of established/advanced, which will be used as part of the overall BEIS assessment.



## Non-Siebel awards

STFC works closely with a number of organisations, both nationally and internationally. These partner organisations may reflect collaborative activities, subsidiaries, joint ventures or major outsourced service provision. Strategic partnerships represent the major part of STFC non-Siebel funding to third parties. Major components include:

- International Subscriptions
- Joint Ventures
- Institutes

Funding in these activities represents STFC international collaborations. I take assurance on these activities through the governance frameworks in place, including:

- Concordats, Treaties etc. setting out the rules and relationships for our engagement;
- Representative roles within the key organisations (e.g. Governing Bodies);
- For major projects we establish Programme Boards and/or Oversight Committees;
- We have designated leads within STFC who report periodically on issues emanating from these activities to Executive Board, Council and Audit Committee; and
- We take assurance from the Annual Accounts of these organisations and in some cases we are engaged in audit arrangements.

Whilst, the assurance provided through this framework indicates a number of funding pressures, I am reassured through the mechanisms described here that they are being managed in an appropriate manner and that there are no major issues that warrant reference here.

## SIGNIFICANT ISSUES

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As a consequence of the risk management and review processes described above I have concluded on an overall positive control environment. Nevertheless, I highlight the following significant issues that continue to receive close attention:

- Staffing
- Change Programme – UK Research and Innovation
- EU Exit
- GDPR
- Major investments (business case, project management & benefits)

## STAFFING

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We continue to have difficulty recruiting and retaining staff in Scientific, Engineering and Technology (SET) roles. Concerns are around the current level of recruitment, losing experienced staff due to pay, and the challenges associated with recruiting Early Careers staff. We also struggle to recruit mid-career staff and hard to fill roles – like Engineers, Technicians and IT.

STFC and UK Research and Innovation are exploring further actions to focus on a dynamic Talent and Skills Strategy, Talent Management Framework, and a robust end-to-end recruitment strategy. This will include pay flexibility, expansion of entry-level scheme, apprentice co-ordinators to support the expansion of our entry-level schemes and development of a comprehensive STFC skills strategy. Whilst there has been a recent welcome flexibility for STEM staff, this is a critical risk for STFC and staffing has been highlighted as a critical risk within the UK Research and Innovation change programme.

Pay setting arrangements throughout the Civil Service are set out in guidance issued by HM Treasury. I can confirm that STFC was compliant with the requirements.

## CHANGE (INCLUDING THE HIGHER EDUCATION RESEARCH ACT 2017)

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The Higher Education and Research Bill, which included the proposal for the creation of UK Research and Innovation on 1st April 2018, received Royal Assent on 27th April 2017. UK Research and Innovation will operate across the whole of the UK with a combined budget of more than £6 billion and will bring together the seven Research Councils, Innovate UK and a new organisation, Research England. UK Research and Innovation will continue to ensure the UK maintains its world leading position in research and innovation. Whilst, there remains a risk that activities are not perfectly joined up as UK Research and Innovation transforms into a steady state, we will continue with STFC stewardship framework reporting directly to the Executive Chair and STFC Finance Committee. We will work closely with UK Research and Innovation to align with UK Research and Innovation priorities, to provide assurance and engage constructively with the reporting framework adopted by UK Research and Innovation.

Our present system is a success and key elements of it will remain including controls existing in 2017-18, which will continue in 2018-19. UK and International asset transfers are well underway and are scheduled to complete before October 2018 during which time the existing legacy bodies will remain legal entities. The structures and committees for the internal governance of UK Research and Innovation are all agreed and terms of reference exist for the main committees (the Strategy Committee, the Investment Committee, the Finance and Operations Committee and the Audit, Risk, Assurance and Performance Committee (ARAPC)).

## EU EXIT

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Following the referendum on 23 June 2016, the UK is now scheduled to leave the EU on 29 March 2019. This means that future access to EU research funding and the nature of future immigration arrangements with the EU for researchers is subject to the negotiations between the UK and EU which at the time of the laying of this report are still underway. To address the uncertainty in relation to future EU funding, in August 2016 the UK Government announced that it would guarantee certain EU funded projects after the UK has left the EU. The Research Councils and Innovate UK continue to monitor developments and we are addressing this risk by working closely with colleagues in government and the wider sector to ensure an effective and joined up approach to the implications of leaving the EU.

## INFORMATION MANAGEMENT

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

As we integrate into UK Research and Innovation, STFC is working closely through the UK Research and Innovation governance arrangements to harmonise systems across:

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

In our 2016-17 annual report, we referred to two ICO reported data breaches. During 2017-18, we have implemented a range of improvements within the impacted processes and third party contractual arrangements. In 2017-18, there were no significant incidents where a lapse in the security of personal data resulted in the need to report an incident to the Information Commissioner's Office.

## GENERAL DATA PROTECTION REGULATION (GDPR)

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The introduction of GDPR, on 25 May 2018, brings about substantial changes to the existing Data Protection Act 1998. Failure to comply could result in fines up to €20m or 4% of turnover and significant reputational damage to STFC. A cross-Council and Innovate UK project, led by the AHRC Director of Resources as SRO, has been established to take forward the changes. A 'health check' undertaken by internal audit identified the project as a 'medium risk' bordering on a 'low risk'. This, however, continues to be a key risk due to the significant impact of non-compliance if there is an incident where we are at fault.

## CYBER SECURITY AND INFORMATION ASSURANCE

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The last few years have seen growing cyber threats to and attacks on STFC. STFC recognises these ongoing and increased Cyber Security threats and the challenges to managing them. We have a commitment to continually improve our controls, training and awareness through the Security Policy Framework (SPF) and implementing best practice.

STFC now has Cyber Essentials accreditation. External penetration testing on an identified range of critical systems was completed at the end of May and November and no critical vulnerabilities were discovered. Even so, it is recognised that we need to remain vigilant over design, implementation and monitoring of controls. Audit Committee has commissioned further analysis of risks in line with the CDCAT framework.

## MAJOR INVESTMENTS (BUSINESS CASE, PROJECT MANAGEMENT & BENEFITS)

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We work in an environment of high value, complex and novel technologies and facilities. We attract and continue to bid for large-scale major investments. We recognise the need for well-informed investment decisions and demonstrating a positive return on public investment.

STFC has a track record of delivery, built on a comprehensive project management framework and robust governance structures around these projects. Through, the well-established 'Bid Process' we review business case, including the financial projections and risks. The STFC Project Review Committee (PRC) monitors the health of STFC's significant investments through 'light-touch' monitoring of major and business critical, projects.

In each case we monitor the benefits that formed the basis of the business cases and ensure that they continue to reflect stakeholder needs, including HMT on the management of the UK investment.

Given the inherent ongoing risks (reputational and financial) associated with these activities, the PRC and the stewardship framework will remain in place post 1 April 2018 reporting directly to the Executive Chair and STFC Finance Committee. This will be aligned to the assurance and reporting framework adopted by UK Research and Innovation.

## OTHER ACTIVITIES WARRANTING REGULAR OVERSIGHT

### REGULARITY AND PROPRIETY

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STFC is committed to establishing and applying appropriate standards of regularity and propriety, and does not tolerate any form of fraud, bribery or corruption. It is important in this context that we guard against the perception of impropriety as well as the reality.

The Cabinet Office (CO) has been working with core departments to determine Counter Fraud Functional Standards, which will be in force from the start of the 2017-18 financial year. These standards provide a comprehensive and consistent approach across the public sector. STFC has been assessed as Amber (i.e. 60-90% compliant) against the counter fraud standards and a programme is in place to ensure future compliance. The two main areas to address relate to outcome-based metrics and improved focus on detection mechanisms.

We continue to operate structures and systems for fraud and error which include:

- Board level Counter Fraud & Error accountability;
- Fraud & Error Capacity assessment; Fraud & Error risk assessment; Fraud & Error Action Plan; and
- A cross Council 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 the Public Interest Disclosure Act (PIDA) and facilitates whistleblowing through a number of routes. There have been no cases of whistleblowing or suspected fraud during the year.

### SAFETY, HEALTH AND ENVIRONMENT (SHE)

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STFC SHE management system is well established and communicated to all staff. A strong control environment continues. We remain vigilant as we operate with high-risk equipment and materials. We continue to extend the scope of implementation of STFC SHE Management system into all aspects of STFC operations with increasing focus on behavioural safety and SHE leadership.

We have a low rate of historic incidents, and positive performance compared to similar organisations. We have had no major regulatory breaches, SHE incidents or learning opportunities, and SHE inspections/audits indicate good standard of application of the SHE management systems across the organisation. A fuller commentary on SHE activities is included in the Director's Report.

### OFF-PAYROLL TAX COMPLIANCE (INCLUDING: ALEXANDER TAX COMPLIANCE)

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Government reform of intermediaries' legislation for public sector engagements set out the responsibility for the correct employment taxes to be paid to rest with the relevant public sector body or agency / third party paying the company. STFC's arrangements in respect of this small but important workforce group (typically some 1% of its workforce) are compliant with the recommendations of the Alexander Review and off-payroll public sector legislation.

### MACPHERSON REVIEW

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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 BEIS requirements STFC have reviewed their use of analytical modelling in 2017-18 and have not identified any that were considered to be business critical.

## CONCLUSIONS

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I have considered the evidence provided to support this statement and the information provided to me by Dr Bowsher. I conclude on an effective organisation and I believe that there is a sufficient range of assurances available to provide satisfactory assurance both in terms of science delivery and regularity of spend. This is founded on a strong strategic approach, a good evidence base and a strong reputation. We continue to strengthen our relations with industry, academia and other stakeholders and above all we continue to deliver science and facilities of the highest quality.

We will continue to press for improvement from within STFC and from our key partners, particularly in the areas highlighted in this statement. We go forward with a strong foundation. We have delivered and helped deliver major successes in our programme over the past year. We have secured significant additional capital investments in our campuses and facilities demonstrating confidence in our plans and the important part they play in contributing to the economy. The Government remains strong in expressing its support for science and innovation as drivers of economic recovery.

## REMUNERATION AND STAFF REPORT

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### REMUNERATION POLICY

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The Council comprises external appointees and the Chief Executive. The Chief Executive's remuneration is detailed below. The Business and Science group within BEIS advises Research Councils of the rates they are required to pay and these are reviewed annually. The standard honorarium paid to Council members remained unchanged at £6,850, effective from 1 October 2009. Council members may receive an additional honorarium for chairing advisory committees. Council members did not become members of a pension scheme and there were no superannuation payments relating to the fees paid to them.

### REMUNERATION OF SENIOR EMPLOYEES

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#### CHIEF EXECUTIVE

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The remuneration of all Research Council Chief Executives is determined by a BEIS Remuneration Committee chaired by the Director General, Business and Science (DGBS) and approved by the BEIS Permanent Secretary. Chief Executives are paid both a basic salary, reflecting the differing sizes and responsibilities of the Councils and performance pay comprising annual, RCUK and appointment term bonuses of up to 5%, 5% and 10% respectively.

At the beginning of each year, the DGBS, and the relevant Council Chairs, agree with Chief Executives a set of individual and RCUK performance objectives for the year. In addition, a set of appointment term objectives are agreed early in the appointment, which are reviewed annually. At the end of the year, the Chief Executive and Chair write an assessment of performance over the year, and the DGBS, with advice from colleagues, agrees an assessment of overall performance and specific achievements against objectives for annual and appointment term objectives. The BEIS Remuneration Committee then meets to review the Chief Executives' performance and agree its recommendations, for approval by the BEIS Permanent Secretary.

#### OTHER SENIOR EMPLOYEES

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STFC's Remuneration Committee is a standing committee of Council, and its role is to determine the remuneration of the senior staff in STFC, both base pay and annual performance related bonus payments, based on the achievement of both corporate and individual objectives.

Membership during 2017-18 was:

Mr Gerard Connell, Chair and Council Member  
Mrs Gill Ball, Council Member  
Mr Marshall Davies, co-opted former Council Member

Dr Brian Bowsher, Chief Executive, also attended as an observer.

Mrs Diana Chaloner was secretary to the Committee.

The Committee considered senior basic pay rates taking account of the Government's guidance that the overall increase to the senior staff pay bill should not exceed 1%. Noting that the senior staff bonus arrangements were designed to reward high individual performance and that bonus payments fell outside the 1% basic pay limit, the Committee agreed that the job evaluation-based spot salary points, and individual salaries of senior staff, should be increased by 1% with effect from 1 April 2017.

In determining bonus payments relating to performance in 2016-17 (but paid for in 2017-18), the Committee took account of the sponsoring department's guidance on bonus awards for senior staff and, as in 2016-17, allocated 3.3% of the senior staff pay bill for bonuses. That sum was allocated on the basis of an assessment of each individual's performance during the year, taking account of the

individual's self-assessment, the line manager's appraisal of that self-assessment and the Committee's own moderation of these. A bonus was paid only where there was demonstrable achievement beyond what was specified in the individual's job description. The resulting individual bonus payments ranged from 1.9% to 4.5% of basic salary.

## REMUNERATION OF SENIOR EMPLOYEES (AUDITED)

The following sections provide details of the remuneration and pension interests received by senior employees in their capacity as members of Executive Board during the year.

	2017 18					2016 17				
	Salary £'000	Bonus £'000	Benefits in kind (to nearest £100)	Pension benefits (to nearest £1000)	Total £'000	Salary £'000	Bonus £,000	Benefits in kind (to nearest £100)	Pension benefits (to nearest £1000)	Total £,000
Dr Brian Bowsher	140-145	-	11,900	58,000	210-215	55-60 (135-140) Full year equivalent	-	7,300	19,000	85-90
Dr Timothy Bestwick	105-110	0-5	-	-	110-115	110-115	0-5	-	-	110-115
Professor Grahame Blair	100-105	0-5	-	31,000	130-135	100-105	0-5	-	39,000	140-145
Mrs Diana Chaloner	100-105	0-5	-	41,000	140-145	20-25 (90-95) Full year equivalent	-	-	9,000	30-35
Dr Sharon Cosgrove	100-105	0-5	-	50,000	150-155	100-105	0-5	-	40,000	145-150
Mr Neil Phimister	110-115	0-5	-	49,000	160-165	100-105	0-5	-	40,000	145-150
Mr Gordon Stewart (until 16 July 2017)	30-35 (115-120) Full year equivalent	0-5	-	12,000	50-55	115-120	0-5	-	47,000	165-170
Dr Andrew Taylor	105-110	0-5	-	-5,091	125-130	105-110	0-5	-	19,000	125-130

a. Salary includes any allowances but not employer's pension contribution.

b. Due to the timing of the senior staff appraisal process, the bonuses disclosed for 2017-18 were paid in 2017-18 and relate to performance in 2016-17; and those disclosed for 2016-17 were paid in 2016-17 and relate to performance in 2015-16.

c. In line with previous years, an estimated figure for senior staff bonuses relating to 2017-18 has been accrued and individual bonus payments will be reported in the 2018-19 Remuneration Report.

d. The negative pension benefits figure for Dr Taylor results from the increase in pension due to extra service and a pay increase being more than offset by the inflation figure (3%) used in the pension calculations.

## BENEFITS IN KIND

The monetary value of benefits in kind covers any benefits provided by the employer and treated by HMRC as a taxable emolument.

As part of his CEO employment package, Dr Brian Bowsher received an accommodation allowance of up to £15,400 a year towards the cost of renting accommodation in the vicinity of the Rutherford Appleton Laboratory in Oxfordshire. The cost to STFC of providing accommodation in 2017-18 was £10,128. Dr Bowsher also received reimbursement of weekly travel costs to and from his permanent home to work or to his place of temporary residence. The cost to STFC of these travel costs in 2017-18 was £1,789.

No other members of the Executive Board received benefits in kind in 2017-18 (2016-17: Nil).

## PENSION ENTITLEMENTS OF SENIOR EMPLOYEES (AUDITED)

	Accrued pension at retirement age as at 31/3/18 and lump sum	Real increase /(decrease) in pension and related lump sum at pension age	CETV at 31/3/18	CETV at 31/3/17	Real increase in CETV
	£'000	£'000	£'000	£'000	£'000
Dr Brian Bowsher	0-5 plus no lump sum	2.5-5 plus no lump sum	76	22	44
Dr Timothy Bestwick <sup>1</sup>	-	-	-	-	-
Professor Grahame Blair	60-65 plus no lump sum	0-2.5 plus no lump sum	865	795	20
Mrs Diana Chaloner	0-5 plus no lump sum	0-2.5 plus no lump sum	43	13	22
Dr Sharon Cosgrove	15-20 plus no lump sum	2.5-5 plus no lump sum	314	258	38
Mr Neil Phimister	10-15 plus no lump sum	2.5-5 plus no lump sum	125	87	27
Mr Gordon Stewart (to 16 July 2017)	25-30 plus no lump sum	0-2.5 plus no lump sum	343	331	6
Dr Andrew Taylor <sup>2</sup>	50-55 plus 160-165 lump sum	0-2.5 plus 0-2.5 lump sum	1,074	1,063	(6)

1 Dr Timothy Bestwick is not a member of the Research Councils' Pension Scheme.

2 The negative Real Increase in CETV figure for Dr Taylor results from the increase in pension due to extra service and a pay increase being more than offset by the inflation figure (3%) used in the pension calculations.

### ACCRUED PENSION

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 pension age. Pension age is dependent on the scheme in which the individual is a member.

### CASH EQUIVALENT TRANSFER VALUES

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 or partner's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in the 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 pension scheme, or arrangement the individual has transferred to the Research Councils' pension arrangement, and for which the RCPS has received a transfer payment commensurate with the additional pension liabilities being taken on. They also include any additional pension benefit accrued to the member as a result of their buying additional pension benefits at their own cost.

CETVs are calculated 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.



## REAL INCREASE IN CETV

The real increase in the value of the CETV reflects the increase funded by the employer. It takes account of 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. The CETV figure can be negative where pension increases resulting from an extra year's service and any pay increase are more than offset by the inflation increase used in the calculations.

## COMPENSATION FOR LOSS OF OFFICE AND EARLY RETIREMENT FOR DIRECTORS (AUDITED)

There were no loss of office or early retirement cases involving directors in 2017-18.

## FAIR PAY DISCLOSURE (AUDITED)

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 mid-point of the banded remuneration of the highest paid director in 2017-18 was £152,500 (2016-17: £142,500). This was 3.92 times (2016-17: 3.75) the median remuneration of the workforce, which was [£38,835] (2016-17: £37,983).

In 2017-18 no (2016-17: 0) employee received remuneration in excess of the highest-paid director. The range of remuneration in 2017-18 was from £11,100 to £152,500 (2016-17: £10,990 to £142,500).

Remuneration includes gross salary, allowances, benefits in kind and non-consolidated performance-related pay. It does not include severance payments, employer pension contributions and the cash equivalent transfer value of pensions.

## MEMBERSHIP OF STFC COUNCIL

	Annual honoraria	
	2017 18	2016 17
	£'000	£'000
Mrs Gill Ball	5-10	5-10
Mr Gerard Connell	5-10	5-10
Professor Karen Holford	5-10	0-5
Professor Richard Kenway	5-10	0-5
Professor Carole Mundell	5-10	5-10
Professor Jordan Nash	5-10	5-10
Professor David Price	5-10	5-10
Professor Tony Ryan	5-10	0-5
Professor Sir Michael Sterling (Chair)	20-25	20-25
Mr Ian Taylor	5-10	5-10
Dr Richard Worswick	5-10	5-10

The Council reimburses travel and subsistence expenses necessarily incurred by Council members attending meetings or undertaking other tasks arising from their membership, in accordance with the conditions and at the rates applying to the Council's employees. The amount reimbursed for 2017-18 was £5,450 (2016-17: £5,892).

## STAFF REPORT

### NUMBER OF SENIOR CIVIL SERVICE STAFF (OR EQUIVALENT) BY BAND

The distribution of Senior Civil Service (SCS) equivalent staff by salary band at 31 March 2018 and 2017 respectively was:

Salary band	SCS equivalent at 31 March 2018		SCS equivalent at 31 March 2017	
	Number	Percentage	Number	Percentage
£60,000-£70,000	-	-	-	-
£70,001-£80,000	12	30.0%	12	31.6%
£80,001-£90,000	14	35.0%	11	28.9%
£90,001-£100,000	5	12.5%	6	15.8%
£100,001-£110,000	7	17.5%	7	18.4%
£110,001-£120,000	1	2.5%	1	2.6%
£120,001-£130,000	-	-	-	-
£130,001-£140,000	1	2.5%	1	2.6%

### STAFF COSTS (AUDITED)

Staff and related costs comprise:

Financial year	2017 2018	2016 2017
	£'000	£'000
<b>Staff costs</b>		
Salaries and wages:		
Permanently employed staff	80,868	78,219
Council and committee members	94	81
Students	1,123	1,123
Locally engaged staff overseas	1,689	1,577
<b>Total salaries and wages</b>	<b>83,774</b>	<b>81,000</b>
Social security costs	9,400	8,769
Superannuation	19,519	18,655
<b>Total staff costs</b>	<b>112,693</b>	<b>108,424</b>
Secondments	891	1,056
Agency and contractors	2,249	2,705
Capitalised pay costs	(7,938)	(8,098)
<b>Total</b>	<b>107,895</b>	<b>104,087</b>

### STAFF NUMBERS (AUDITED)

	2017 18	2016 17
<b>Average number of FTE employees during the year</b>		
Permanently employed staff	1,972	1,934
Council and committee members	3	3
Students	61	62
Locally engaged staff overseas	39	40
<b>Total staff</b>	<b>2,075</b>	<b>2,039</b>
Secondments	20	19
Agency and contractors	43	53
<b>Total</b>	<b>2,138</b>	<b>2,111</b>

Permanently-employed staff comprises all permanent and fixed-term staff paid as employees through the payroll.

### SUPERANNUATION

Most employees of STFC are members of the Research Councils' Pension Schemes (RCPS) including the associated Partnership Pension Account. A small number of employees retain membership of the Principal Non-Industrial Superannuation Scheme (PNISS) of the United Kingdom Atomic Energy Authority. In addition, from 2014-15 a few eligible employees have been auto-enrolled in the National Employment Savings Trust (NEST), the Government's workplace pension scheme.

The RCPS is a defined benefit scheme funded from employer and employee contributions and annual grant-in-aid on a pay-as-you-go basis. The benefits are by analogy to the Principal Civil Service Pension Scheme, except that while the schemes provide 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 with the associated grant-in-aid managed by BBSRC. The schemes accounts are prepared by BBSRC on behalf of the BBSRC Chief Executive as the accounting officer of RCPS. Separate accounts are published for the pension schemes.

Employees may be in one of four defined schemes; 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). Employees' contributions vary between 1.5% and 8.05% depending on scheme. The employer's contribution is agreed by the RCPS Board of Management on the recommendation of the Government Actuary's Department (GAD) and is currently set at 26.0% of pensionable pay.

The employer's contribution to the RCPS for 2017-18 was £19.202 million (2016-17: £18.373 million).

The PNISS is a notionally funded, contributory, defined benefit scheme which is closed to new entrants. Employees who are members of the PNISS made pension contributions at the rate of 10.7% of pensionable pay during 2017-18. The Council makes employer's contributions at a rate determined from time to time after actuarial assessment of assets and liabilities. In 2017-18 the employer's contribution rate was 15.8% of pensionable pay. The employer contribution for 2017-18 was £0.138m (2016-17: £0.170 million).

A separate PNISS Scheme account is produced by the United Kingdom Atomic Energy Authority (UKAEA) that recognises the scheme liability in accordance with *IAS (International Accounting Standards) 19* as interpreted by the *FReM* for use in the public sector.

As an alternative to the RCPS, 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 2017-18 was £0.177m (2016-17: £0.109m).

Employer's 0.8% death in service Partnership contribution for 2017-18 was £4,295 (2016-17: £4,075).

On 1 April 2015 Civil Service Pensions 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 operate by analogy to the new Alpha scheme as the legislation does not permit this. Reform options are currently being discussed with HM Treasury; meanwhile, BEIS and HM Treasury have given permission for RCPS to continue 'as is' beyond April 2018.

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 STFC in an independently administered scheme. It is not possible to identify STFC's share of the underlying assets and liabilities of the Research Councils' Pension Scheme. In the RCPS, STFC 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 benefit plan as stated in IAS 19.

Formal actuarial valuations are used to determine employer and employee contribution rates. The last actuarial valuation undertaken for RCPS was at 31 March 2006 and 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 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 of the RCPS and therefore future employer contribution rates will be established once the scheme reforms are implemented.

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

## STAFF COMPOSITION

The distribution of directors, senior (SCS equivalent) staff and other employees by gender at 31 March 2018 and 2017 respectively was:

Employees by gender	At 31 March 2018			At 31 March 2017		
	Female	Male	Total	Female	Male	Total
Directors (Executive Board)	2	5	7	2	6	8
Other senior (SCS equivalent) staff	10	23	33	7	23	30
Other employees	548	1,561	2,109	510	1,532	2,042
<b>Total</b>	<b>560</b>	<b>1,589</b>	<b>2,149</b>	<b>519</b>	<b>1,561</b>	<b>2,080</b>

## SICKNESS ABSENCE DATA

STFC actively manages sickness absence to minimise the effects on its work programme and also minimise the costs related to these absences. Sick absence information is regularly made available to managers and senior managers so that absences can be managed effectively. The production of annual sickness absence data allows STFC to benchmark performance against appropriate comparable organisations.

The data provided has been extracted from our absence records for all main-grade STFC employees for the period 1 April 2017 to 31 March 2018. The main findings are summarised below:

- The total number of days lost to sickness absence over the period by all employees covered by the sickness absence arrangements was 12,887. The average number of staff (persons) employed over the period and covered by the sickness absence arrangements was 2,094; the average full time equivalent (FTE) count was 2,027.
- The derived absence rate (days lost per person) was 6.15; the headline absence rate (days lost per FTE) was 6.36.
- Overall, there has been a marginal increase in the derived absence rate from 6.13 days in 2016-17 to 6.15 in 2017-18. The latest (2016) CIPD Absence Management Survey reported that the average level of employee absence was 6.3 days per employee per year.

STFC remains committed to keeping sickness absence levels as low as practically possible through the monitoring of absence statistics for significant trends and the active management of individual cases.

## STAFF POLICIES APPLIED DURING THE FINANCIAL YEAR

### RECRUITMENT AND CONTRACTS OF EMPLOYMENT

All appointments to permanent roles in STFC are made on the basis of merit and through fair and open competition. The Chief Executive allocates responsibilities to senior employees. Unless otherwise stated below, the staff covered by this report hold appointments, which are open-ended. Senior employees are required to give a notice period of three months. As with all employees, senior employees no longer have a contractual retirement age, in accordance with legislation, but are eligible to draw their pension from the age of 60 or 65 in accordance with the rules of the relevant pension scheme.

Early termination of employment, other than for misconduct, would result in the individual receiving compensation by analogy with the provisions of the Civil Service Compensation Scheme or as specified in individual contracts of employment.

## EQUALITY, DIVERSITY AND INCLUSION

STFC has maintained its strong commitment to equality, diversity and inclusion (EDI), recognising the benefits that a truly diverse and inclusive workforce can bring. It continues to deliver on its 5-year EDI Strategy and Action Plan, which is being updated and synchronised in line with the inception of UK Research and Innovation on 1 April 2018. STFC's Action Plan aims to improve diversity and fair decision making in all areas of its work, including for those in receipt of our grant funding. STFC's EDI Strategy and Action Plans are published on our website.

STFC is a member of Athena Swan and submitted an application for accreditation in November 2017. The Chief Executive, Brian Bowsher, and EDI Champion, John Collier have committed STFC to the principles of the charter.

STFC has also achieved 'Disability Confident' accreditation and has made a commitment to recruit, retain and develop the careers of disabled staff. STFC will be participating in the Change 100 initiative to provide internship opportunities for disabled graduates in 2018.

STFC continues to encourage and nurture its established support networks for women, black, Asian and minority ethnic (BAME) staff and its provision for dyslexic and autistic staff and visitors. These groups continue to raise awareness and provide practical support, such as the provision of specific training opportunities, as well as providing advice to STFC as an employer on how to ensure that all of its staff have the opportunity to develop and work effectively. STFC's support and expertise on workplace support for dyslexic and autistic people has been recognised by the Chartered Institute of Personnel & Development.

At 31 March 2018 for main-grade employees:

- The average age of employees in STFC was 44.3, the same as last year's average.
- 6.2% of employees were non-white, slightly higher than last year's figure of 5.8%.
- 26.5% of all staff were female, a percentage point increase on last year's figure of 25.3%; of the 2018 female total, and 42.3% were in STEM subjects.
- 3.3% of staff were known to be disabled, a small increase on the 2.8% reported last year.

### STFC Gender Pay Gap

Gender Pay Gap legislation introduced in April 2017 requires all employers of 250 or more employees to publish their gender pay gap for workers in scope as of 5 April 2017. STFC's first Gender Pay Gap Report was published in March 2018.

The gender pay gap is the difference in the average hourly wage of all men and women across a workforce and is calculated by organisations as at 5 April 2017. In favour of men, the mean gender pay gap at STFC at that date was 8.5% and the median gender pay gap was 10%. Further splitting the average pay by grade, to compare equal pay for equal work, greatly reduces the gender pay gaps, particularly in more junior grades. This indicates that the larger overall gender pay gap at STFC comes not from inequality of pay for equal work but from there being a higher proportion of women in the lowest pay quartile (33% of all women at STFC are in this pay quartile compared to 25% of men). Only 25% of STFC staff are women, illustrating that women are over-represented in the lowest pay quartile and within an organisation like STFC, that has a primarily male workforce, small fluctuations in the female population can make a large impact to the gender pay gap.

In STFC, one key approach to closing the gender pay gap has been to address the under-representation of women within Science, Technology, Engineering and Mathematics (STEM) roles, which on average are more highly graded and form 77% of all STFC staff. Only 14% of STFC's STEM workforce are female (matching the national average) and to address this under-representation STFC manage a number of initiatives aimed at increasing the recruitment and retention of women in STEM roles including: supporting

associations for Women in Science Technology, Engineering and Mathematics (WiSTEM) who meet regularly to network and; sponsoring Women into Science and Engineering (WISE) awards as a member of Research Councils UK (RCUK). Between 2013 and 2018, overall staff numbers have increased by 24% and the recruitment of women into STFC and STEM roles has increased consistently. During this time, the percentage of women in STFC apprenticeships and at a senior level has increased considerably along with an increase represented in mid-level grades and an overall decrease of women represented in the most junior grades.

The initiatives managed by STFC aimed at increasing the recruitment and retention of women (particularly in STEM roles) are integral to encouraging a balanced workforce; however, it is important to understand that more women recruited into lower graded roles (graduates or apprentices etc.) may increase our gender pay gap in the short-term so a continuing focus on ensuring that promotion routes remain unbiased and transparent is integral to promote movement upwards within the organisation.

## EMPLOYEE ENGAGEMENT

Formal consultation with the recognised Trade Unions has continued through regular central and local Joint Consultation Council meetings, including an annual meeting at which the Chief Executive provides a report on relevant organisational developments and reviews STFC's past and future programme. At these meetings, representatives have an opportunity to raise other topical issues directly with the Chief Executive and other senior staff members.

For a second year STFC, together with the other Research Councils, took part in the Civil Service Employee Engagement Survey. Responses to this show that STFC participation was lower than last year and generally lower than the other Research Councils. However the overall results would indicate that there is a very slight (1%) reduction in engagement compared with last year.

Similar to last year staff have a clear understanding of how their work contributes to the success of the organisation and feel that they are treated fairly and with respect. They were particularly positive about how well they thought teams worked together, the survey showed a 4% increase in positive responses to team working compared with last year, with high degrees of trust and affinity in the overall work of STFC and with their colleagues.

The lower score regarding change, which indicated a 5% decrease compared to last year, perhaps indicates a degree of uncertainty regarding the transfer to UK Research and Innovation.

In response to this STFC is working to consider ways to address the pay issues within STEM scarce skills roles. Effective communication and information is now a priority to ensure all staff are fully informed as we transfer into UK Research and Innovation and an STFC Transition Team has been created to ensure this happens.

## LEARNING AND DEVELOPMENT

STFC depends on a highly-skilled workforce to deliver its future agenda of world-class research, world-class innovation and world-class skills. Staff take part in a broad range of technical, management and soft skills training courses, conferences, online learning, coaching and mentoring.

STFC staff have access to a range of core soft skills training which supports organisational performance. New programmes were launched during the year with the objective of raising standards of skill and competence across STFC. As part of the management and personal development programme, we use a psychometric tool to improve communications and relationships within teams to support STFC's culture of team-based working and collaboration.

STFC also offers an Accelerated Development Programme to provide a period of targeted investment into those staff who are showing the potential to progress rapidly to strategic leadership roles. This highly visible programme enjoys strong support from senior staff who provide mentoring and input to the design of the programme.

STFC has an increasing focus on apprentices, students and graduates as an integral part of the talent pipeline.

The Apprenticeship Scheme continues to grow both in numbers and breadth of discipline.

In 2017-18 there were 27 new apprentice recruits and 12 existing staff commenced apprenticeship programmes. There were 78 apprentices on programme across STFC in Engineering (Level 3 and 6), Software Engineering (Level 6), ICT (Level 3), Electrical Installation (Level 3), Project Management (Level 4) and Metrology (Level 3).

13% of STFC's current apprentices are female, and of apprentices that started employment between 2002 and 2013 the retention rate is 43%.

A programme of formal and informal learning opportunities for graduates and students saw the second early careers conference and an integrated leadership programme. All graduates are supported to achieve chartered status with the relevant professional institution.

The STFC Apprentice Scheme is accredited by the Institution of Engineering and Technology (IET), and STFC Graduate Scheme is accredited by the Institution of Mechanical Engineers (IMechE), the IET and the Institute of Physics (IoP).

## EXPENDITURE ON CONSULTANCY

Expenditure on external consultancy in 2017-18 was £255,000 (2016-17: £208,000)

## OFF-PAYROLL ENGAGEMENTS

For all off-payroll engagements as of 31 March 2018, for more than £245 per day and that last longer than six months:

	Number
Number of existing engagements as of 31 March 2018	29
Of which, the number that have existed:	
For less than one year at the time of reporting	4
For between one and two years at the time of reporting	10
For between 2 and 3 years at the time of reporting	8
For between 3 and 4 years at the time of reporting	6
For 4 or more years at the time of reporting	1

For all new off-payroll engagements between 1 April 2017 and 31 March 2018, for more than £245 per day and that last longer than six months:

	Number
Number of new engagements, or those that reached six months in duration between 1 April 2017 and 31 March 2018	35
Number of new engagements which include contractual clauses giving STFC the right to request assurance in relation to income tax and National Insurance obligations	35
Number for whom assurance has been requested*	0
Of which:	
assurance has been received	0
assurance has not been received	0
Engagements terminated as a result of assurance not being received	0

As a result of STFC implementing the reform of the intermediaries' legislation, from 1 April 2017, off payroll workers at STFC are on arrangements in which the supplier agencies process their payments through PAYE to ensure full tax compliance. The only exception to this is in rare cases where the HMRC tool has shown that an off payroll worker's engagement arrangements fall outside of the scope of the intermediaries legislation IR35, presently this circumstance applies to just one off payroll worker working through a Limited company.

For any off-payroll engagements of board members, and/or, senior officials with significant financial responsibility, between 1 April 2017 and 31 March 2018:

	Number
Number of off-payroll engagements of board members, and/or senior officials with significant financial responsibility, during the financial year	0
Total no. of individuals on payroll and off-payroll that have been deemed "board members, and/or, senior officials with significant financial responsibility" during the financial year	21

## EXIT PACKAGES (AUDITED)

Exit package cost band	Number of compulsory redundancies		Number of other departures agreed		Total number of exit packages by cost band	
	2017-18	2016-17	2017-18	2016-17	2017-18	2016-17
Less than £10,000	-	-	4	8	4	8
£10,000 - £25,000	-	-	3	-	3	-
£25,000 - £50,000	-	-	4	-	4	-
£50,000 - £100,000	-	-	4	-	4	-
£150,000-£200,000	-	-	-	1	-	1
<b>Total number of exit packages</b>	-	-	<b>15</b>	<b>9</b>	<b>15</b>	<b>9</b>
<b>Total cost (£)</b>	-	-	<b>517,060</b>	<b>216,887</b>	<b>517,060</b>	<b>216,887</b>

Redundancy and other departure costs have been paid in accordance with either the provisions of the Research Councils' Compensation Scheme, which mirrors the terms of the Principal Civil Service Compensation Scheme, a statutory scheme made under the Superannuation Act 1972; or, in relevant cases, with the terms of the (closed) UKAEA Principal Non-Industrial Superannuation Scheme, of which some STFC staff remain members. Exit costs are accounted for in full in the year agreed. Where STFC has agreed early retirements, the additional costs are met by STFC and are not a charge to the pension scheme. Ill-health retirement costs are met by the pension scheme and are not included in the table.



## TRADE UNION FACILITY TIME

The following information is provided to meet the reporting requirements of the Trade Union (Facility Time Requirements) Regulations 2017

Table 1 – Relevant union officials

What was the total number of your employees who were relevant union officials during 2017-18?

<i>Number of employees who were relevant union officials during the relevant period</i>	<i>Full-time equivalent employee number</i>
15	15

Table 2 – Percentage of time spent on facility time

How many of your employees who were relevant union officials employed during 2017-18 spent a) 0%, b) 1%-50%, c) 51%-99% or d) 100% of their working hours on facility time?

<i>Percentage of time</i>	<i>Number of employees</i>
0%	0
1-50%	14
51%-99%	1
100%	0

Table 3 – Percentage of pay bill spent on facility time

Provide the figures requested in the first column of the table below to determine the percentage of your total pay bill spent on paying employees who were relevant union officials for facility time during 2017-18.

<i>First Column</i>	<i>Figures</i>
Provide the total cost of facility time	£52,628
Provide the total pay bill	£112,693,000
Provide the percentage of the total pay bill spent on facility time, calculated as: (total cost of facility time ÷ total pay bill) x 100	0.05%

Table 4 – Paid trade union activities

As a percentage of total paid facility time hours, how many hours were spent by employees who were relevant union officials during 2017-18 on paid trade union activities?

<p><i>Time spent on paid trade union activities as a percentage of total paid facility time hours calculated as:</i></p> <p><i>(total hours spent on paid trade union activities by relevant union officials during the relevant period ÷ total paid facility time hours) x 100</i></p>	<p>5%</p>
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REGULARITY OF EXPENDITURE (AUDITED)

I can confirm that for the financial year ended 31 March 2018, neither I nor my staff authorised a course of action, the financial impact of which is that transactions infringe the requirements of regularity as set out in Managing Public Money, and that Treasury approval has been obtained for all novel, contentious or repercussive transactions relating to 2017-2018.

LONG-TERM EXPENDITURE TRENDS

STFC’s resource near-cash funding over the last five years has increased by £65.5m (16.6%). It should be noted that a significant amount of this increase is due to expenditure on International Subscriptions which has risen by £21.3 million in line with the UK’s agreed contribution.

Over this period STFC received new investment including £5m for Investment in Research Talent, Bridging for Innovators and Impact Acceleration Accounts; and £7m on Newton. The funding profile has enabled us to meet the operating costs of our world-class facilities (ISIS, DLS and CLF – receiving £26m additional funding), including new beamlines and instruments, as well as meeting our obligations on research grants as part of our agreed scientific programme.

There was a significant loss of volume in the core programme between 2010 and 2015 due the effects of inflation. During this period STFC lost 32% of the volume of the programme, were unable to take advantage of some new opportunities and participated in fewer new high priority projects across the programme.

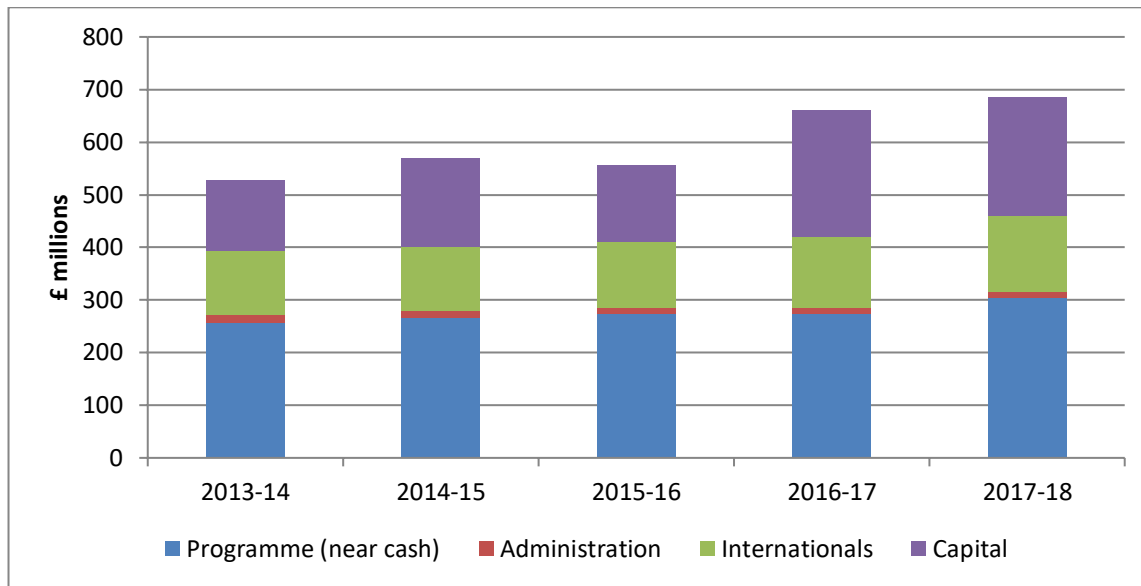
The level of funding provided over the CSR period has enabled us to keep the current volume of operation and access at the large facilities, however, neither ISIS nor CLF have been operating at full capacity since 2010 due to inadequate resource funding. Continued funding at the current level will inevitably lead to a reduction in capacity and increased risk to sustainability.

Administration expenditure has decreased over the period. The decrease of £2.9m (21.4%) reflects the on-going reduction in administration budgets due to public sector efficiency measures.

STFC’s capital expenditure profile is varied as it is comprised of investment in our world-class facilities; operational requirements and specific projects. Projects funded over the period include Hartree Centre £115.5m, High Performance Computing £47m, Campus Development £30m, Space Science Building £25m, National Satellite Test Facility £99m, Energy Efficient Computing £19m, and the Higgs Innovation Centre £10.7m. STFC has also contributed £246m over the last five years to the construction and operation of International Facilities; European Spallation Source, European X-ray Free Electron Laser, and Square Kilometre Array.

**STFC’s Long term funding trend over five years**

£million	2013-14	2014-15	2015-16	2016-17	2017-18
<b>Programme (near cash)</b>	258	266	274	274	305
<b>Administration</b>	13	12	12	11	10
<b>Internationals</b>	124	123	126	136	145
<b>Sub Total</b>	<b>395</b>	<b>402</b>	<b>412</b>	<b>421</b>	<b>460</b>
<b>Capital</b>	133	167	145	239	224
<b>Total Allocation</b>	<b>528</b>	<b>569</b>	<b>557</b>	<b>660</b>	<b>684</b>



## FEES AND CHARGES (AUDITED)

Fees are set to comply with the cost allocation and charging requirements set out in HM Treasury and Office of Public Sector Information guidance.

Facilities are offered to European Union users, commercial users and external users. Users are charged a unit cost based on direct operating costs and annual quantity of access with an allowance for overheads.

## REMOTE CONTINGENT LIABILITIES (AUDITED)

In addition to contingent liabilities reported within the meaning of IAS 37, STFC also reports liabilities for which the likelihood of a transfer of economic benefit in settlement is too remote to meet the definition of contingent liability.

STFC had the following remote unquantifiable contingent liability as at 31 March 2018:

The Council collaborates with a number of other international partners in the funding, management and operation of technical facilities which are not owned by STFC. In the event of a decision to withdraw from any of these arrangements, it is likely that STFC would assist in the search for a replacement partner to ensure that technical commitments were met. The most significant international collaborations are in respect of CERN and ESO. For both of these facilities there is the possibility that STFC would be obliged to contribute to decommissioning costs arising from a decision taken to discontinue operations. The decisions to decommission are not wholly within STFC's control.

Professor Mark Thomson

Accounting Officer  
25 June 2018

### **Opinion on financial statements**

I certify that I have audited the financial statements of the Science and Technology Facilities Council for the year ended 31 March 2018 under the Science and Technology Act 1965. The financial statements comprise: the Group and Parent Statements of Comprehensive Net Expenditure, Financial Position, Cash Flows, Changes in Taxpayers' Equity; and the related notes, including the significant accounting policies. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Accountability Report that is described in that report as having been audited.

In my opinion:

- the financial statements give a true and fair view of the state of the group's and of the Council's affairs as at 31 March 2018 and of the group's and the Council's net expenditure for the year then ended; and
- 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 regularity**

In my opinion, in all material respects the income and expenditure 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.

### **Basis of opinions**

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK) and Practice Note 10 'Audit of Financial Statements of Public Sector Entities in the United Kingdom'. My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my certificate. Those standards require me and my staff to comply with the Financial Reporting Council's Revised Ethical Standard 2016. I am independent of the Science and Technology Facilities Council in accordance with the ethical requirements that are relevant to my audit and the financial statements in the UK. My staff and I have fulfilled our other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### **Responsibilities of the Science and Technology Facilities Council and Accounting Officer for the financial statements**

As explained more fully in the Statement of Accounting Officer's Responsibilities, the Science and Technology Facilities 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.

### **Auditor's responsibilities for the audit of the financial statements**

My responsibility is to audit, certify and report on the financial statements in accordance with the Science and Technology Act 1965.

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. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, I exercise professional judgment and maintain professional scepticism throughout the audit. I also:

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the group's and Science and Technology Facilities Council's internal control.
- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the group's and the Science and Technology Facilities Council's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

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

### **Other Information**

The Science and Technology Facilities Council and the Accounting Officer are responsible for the other information. The other information comprises information included in the annual report, other than the parts of the Accountability Report described in that report as having been audited, the financial statements and my auditor's report thereon. My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon. In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

## **Opinion on other matters**

In my opinion:

- the parts of the Accountability Report to be audited have been properly prepared in accordance with the Secretary of State directions made under the Science and Technology Act 1965;
- in the light of the knowledge and understanding of the group and the parent and its environment obtained in the course of the audit, I have not identified any material misstatements in the Performance Report or the Accountability Report; and
- the information given in 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 Accountability 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**

**Date: 9 July 2018**

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 2018

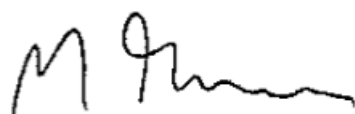
		2017-18	2016-17
		£000	£000
	Note	STFC	Consolidated
<b>Total operating income</b>	4	<b>(79,857)</b>	<b>(77,286)</b>
Staff costs	3	107,895	104,087
Purchase of goods and services	5.1	268,896	252,504
Research grants and other research support	5.2	263,307	259,875
Other operating expenditure	5.3	(6,131)	4
Depreciation and impairment charges	5.4	90,501	95,518
Provision expense	5.5	17,960	3,606
Notional charge for UK SBS services		4,178	4,292
<b>Total operating expenditure</b>		<b>746,606</b>	<b>719,886</b>
<b>Net operating expenditure</b>		<b>666,749</b>	<b>642,600</b>
Finance income		(316)	(339)
Finance expense		1,524	1,205
<b>Net expenditure for the year</b>		<b>667,957</b>	<b>643,466</b>
Less notional charge for UKSBS services		(4,178)	(4,292)
<b>Net expenditure for the year after reversal of notional charge</b>		<b>663,779</b>	<b>639,174</b>
<b>Other comprehensive net expenditure</b>			
Items which will not be reclassified to net operating costs:			
Net gain on revaluation of property, plant and equipment	6	(30,816)	(103,967)
Net gain on revaluation of intangible assets	7	(412)	(70)
Items which may be reclassified to net operating costs:			
Net (gain) / loss on revaluation of investments	9.1,10	(1,793)	-
Net movement in cash flow hedges		25,165	(1,058)
<b>Total Comprehensive net expenditure for the year</b>		<b>655,923</b>	<b>534,079</b>

The notes on pages 60 to 88 form part of these financial statements



## STATEMENT OF FINANCIAL POSITION AS AT 31 MARCH 2018

	Note	31 March 2018		31 March 2017	
		£000 STFC	£000 Consolidated	£000 STFC	£000 Consolidated
<b>Non-current assets:</b>					
Property, plant and equipment	6	848,225	848,225	821,261	821,261
Intangible assets	7	52,361	52,361	29,476	29,476
Financial assets	9, 10	580,393	445,032	560,599	416,647
Trade and other receivables	11	3,949	3,949	4,246	4,246
<b>Total non-current assets</b>		<b>1,484,928</b>	<b>1,349,567</b>	<b>1,415,582</b>	<b>1,271,630</b>
<b>Current assets:</b>					
Trade and other receivables	11	76,375	76,375	70,747	70,747
Derivative financial instruments	8	-	-	5,138	5,138
Cash and cash equivalents	12	9,453	9,453	246	246
<b>Total current assets</b>		<b>85,828</b>	<b>85,828</b>	<b>76,131</b>	<b>76,131</b>
<b>Total assets</b>		<b>1,570,756</b>	<b>1,435,395</b>	<b>1,491,713</b>	<b>1,347,761</b>
<b>Current liabilities:</b>					
Trade and other payables	13	(99,622)	(99,622)	(95,525)	(95,525)
Derivative financial instruments	8	(12,179)	(12,179)	-	-
Provisions	14	(2,079)	(2,079)	(6,400)	(6,400)
<b>Total current liabilities</b>		<b>(113,880)</b>	<b>(113,880)</b>	<b>(101,925)</b>	<b>(101,925)</b>
<b>Total assets less current liabilities</b>		<b>1,456,876</b>	<b>1,321,515</b>	<b>1,389,788</b>	<b>1,245,836</b>
<b>Non-current liabilities:</b>					
Trade and other payables	13	(465)	(465)	(649)	(649)
Derivative financial instruments	8	(11,928)	(11,928)	(4,080)	(4,080)
Provisions	14	(119,498)	(119,498)	(95,833)	(95,833)
<b>Total non-current liabilities</b>		<b>(131,891)</b>	<b>(131,891)</b>	<b>(100,562)</b>	<b>(100,562)</b>
<b>Total assets less total liabilities</b>		<b>1,324,985</b>	<b>1,189,624</b>	<b>1,289,226</b>	<b>1,145,274</b>
<b>Taxpayers' equity and other reserves:</b>					
General reserve		1,066,594	816,391	1,032,270	800,994
Revaluation reserve		258,391	373,233	256,956	344,280
<b>Total equity</b>		<b>1,324,985</b>	<b>1,189,624</b>	<b>1,289,226</b>	<b>1,145,274</b>



Professor Mark Thomson

Accounting Officer  
25 June 2018

The notes on pages 60 to 88 form part of these financial statements

## STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 31 MARCH 2018

	Note	2017-18		2016-17	
		£000 STFC	£000 Consolidated	£000 STFC	£000 Consolidated
<b>Cash flows from operating activities</b>					
Net operating expenditure (after reversal of notional charge)		(663,779)	(681,282)	(639,174)	(670,453)
Adjustments for non-cash transactions		103,852	121,355	105,890	137,169
Increase in trade and other receivables	11	(5,331)	(5,331)	(29,229)	(29,229)
Increase in trade and other payables	13	3,913	3,913	30,287	30,287
Use of provisions	14	(138)	(138)	-	-
<b>Net cash outflow from operating activities</b>		<b>(561,483)</b>	<b>(561,483)</b>	<b>(532,226)</b>	<b>(532,226)</b>
<b>Cash flows from investing activities</b>					
Purchase of property, plant and equipment	6	(92,017)	(92,017)	(81,668)	(81,668)
Purchase of intangible assets	7	(17,105)	(17,105)	(18,941)	(18,941)
Proceeds of disposal of property, plant and equipment		3	3	176	176
Proceeds of disposal of investments		6,532	6,532	-	-
Investment in joint ventures	9.1	(17,855)	(17,855)	(27,239)	(27,239)
Other investments	10	(550)	(550)	-	-
<b>Net cash outflow from investing activities</b>		<b>(120,992)</b>	<b>(120,992)</b>	<b>(127,672)</b>	<b>(127,672)</b>
<b>Cash flows from financing activities</b>					
Grant-in-aid received from BEIS		691,682	691,682	659,711	659,711
<b>Net cash inflow from financing activities</b>		<b>691,682</b>	<b>691,682</b>	<b>659,711</b>	<b>659,711</b>
<b>Net increase/(decrease) in cash and cash equivalents in the period</b>		<b>9,207</b>	<b>9,207</b>	<b>(187)</b>	<b>(187)</b>
<b>Cash and cash equivalents at the beginning of the period</b>	12	<b>246</b>	<b>246</b>	<b>433</b>	<b>433</b>
<b>Cash and cash equivalents at the end of the period</b>	12	<b>9,453</b>	<b>9,453</b>	<b>246</b>	<b>246</b>

The notes on pages 60 to 88 form part of these financial statements

STATEMENT OF CHANGES IN TAXPAYERS' EQUITY FOR THE YEAR ENDED 31 MARCH 2018

	General Reserve £000	Revaluation Reserve £000	STFC £000	General Reserve £000	Revaluation Reserve £000	Consolidated £000
<b>Balance at 1 April 2016</b>	<b>989,733</b>	<b>173,861</b>	<b>1,163,594</b>	<b>789,736</b>	<b>262,686</b>	<b>1,052,422</b>
Grant in aid from BEIS	659,711	-	659,711	659,711	-	659,711
Net expenditure for the year	(639,174)	-	(639,174)	(670,453)	-	(670,453)
<b>Movements in reserves:</b>						
Cashflow hedge	1,058	-	1,058	1,058	-	1,058
Net gain on revaluation of PPE and intangible assets	-	104,037	104,037	-	104,037	104,037
Transfers between reserves	20,942	(20,942)	-	20,942	(20,942)	-
Net loss on revaluation of investments	-	-	-	-	(1,501)	(1,501)
<b>Balance at 31 March 2017</b>	<b>1,032,270</b>	<b>256,956</b>	<b>1,289,226</b>	<b>800,994</b>	<b>344,280</b>	<b>1,145,274</b>
Grant in aid from BEIS	691,682	-	691,682	691,682	-	691,682
Net expenditure for the year	(663,779)	-	(663,779)	(682,706)	-	(682,706)
<b>Movements in reserves:</b>						
Cashflow hedge	(25,165)	-	(25,165)	(25,165)	-	(25,165)
Net gain on revaluation of PPE and intangible assets	-	31,228	31,228	-	31,228	31,228
Transfers between reserves	31,586	(31,586)	-	31,586	(31,586)	-
Net gain on revaluation of investments	-	1,793	1,793	-	29,311	29,311
<b>Balance at 31 March 2018</b>	<b>1,066,594</b>	<b>258,391</b>	<b>1,324,985</b>	<b>816,391</b>	<b>373,233</b>	<b>1,189,624</b>

The notes on pages 60 to 88 form part of these financial statements

## NOTES TO THE ACCOUNTS

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### 1. STATEMENT OF ACCOUNTING POLICIES

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The principal accounting policies applied in the preparation of these financial statements are set out below. The policies have been applied consistently unless otherwise stated.

#### 1.1 BASIS OF ACCOUNTING

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These financial statements have been prepared in accordance with the Accounts Direction issued by the Secretary of State for the Department for Business, Energy and Industrial Strategy (BEIS) pursuant to Section 2(2) of the Science and Technology Act 1965.

These financial statements have been prepared in accordance with the 2017-18 Government Financial Reporting Manual (FReM). The accounting policies contained in the FReM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector.

Where the FReM permits a choice in accounting policy, the accounting policy judged to be most appropriate to the particular circumstances of STFC for the purpose of giving a true and fair view has been selected. The policies adopted by STFC are described below. They have been applied consistently in dealing with items that are considered material to the accounts.

The financial statements are presented in pounds sterling and all values are rounded to the nearest thousand pounds (£'000), except where indicated otherwise.

#### GOING CONCERN

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The Higher Education and Research Bill received Royal Assent on 27 April 2017 confirming the creation of a single executive non-departmental public body, UK Research and Innovation. Under the Higher Education and Research Act 2017, UK Research and Innovation incorporated the assets, liabilities and functions of the seven Research Councils, Innovate UK and Government's funding of research in higher education from 1 April 2018.

Confirmation of UK Research and Innovation's budget allocation for 2018-19 to 2020-21 was received from BEIS in March 2018, which shows continued funding for the functions exercised by STFC for this period.

As the functions previously provided by STFC will continue to be provided by UK Research and Innovation with the same assets and liabilities, it remains appropriate for the financial statements of STFC for the financial year ended 31 March 2018 to be prepared on a going concern basis in accordance with the Government Financial Reporting Manual issued by HM Treasury.

#### 1.2 BASIS OF MEASUREMENT

---

These financial statements have been prepared under the historical cost convention modified to include the fair value of property, plant and equipment, intangible assets and financial instruments to the extent required or permitted under IFRS as set out in the relevant accounting policies.

#### 1.3 BASIS OF CONSOLIDATION

---

STFC has a wholly owned subsidiary, STFC Innovations Limited (SIL), which is consolidated in accordance with IFRS 10 *Consolidated Financial Statements*, to form STFC Group. As there is no material difference between STFC and the STFC Group, STFC's financial statements as reported are those of the STFC Group. In STFC's financial statements, investments in joint ventures are reported at cost less impairment.

The consolidated financial statements are STFC financial statements, as above, but with the investment in joint ventures equity accounted - reported at cost plus post-acquisition changes in STFC's share of the net assets of the joint venture.

Where there is no difference between STFC and Consolidated position in the notes to the financial statements, only the consolidated position is shown.

## 1.4 TANGIBLE NON-CURRENT ASSETS

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### PROPERTY, PLANT AND EQUIPMENT (PPE)

PPE held for its service potential and in use or that is surplus with restrictions on sale, is carried at current value in existing use. PPE that is surplus, without any restrictions on sale, is carried at fair value using IFRS 13 *Fair Value Measurement*. For specialised assets current value in existing use is taken to be depreciated replacement cost.

Freehold land and buildings are revalued on an existing use basis or on a depreciated replacement cost basis for specialist properties using professional valuations.

The capitalisation threshold for PPE is £10,000.

For furniture, fixtures and fittings where an asset pool is maintained, replacements on a one-to-one basis are charged directly to the Statement of Comprehensive Net Expenditure (SoCNE) in the year of replacement. Major enhancements or additions to the pool are capitalised as assets.

### DEPRECIATION

Assets under construction are not depreciated until the asset is brought into use.

PPE is depreciated at rates calculated to write it down to the estimated residual value on a straight line basis over the estimated useful lives.

Freehold land is not depreciated and other property, plant and equipment assets are normally depreciated over the following periods:

- |                                   |                           |
|-----------------------------------|---------------------------|
| • Freehold buildings              | 60 years                  |
| • Long leasehold properties       | 60 years or term of lease |
| • Plant and machinery             | 20 years                  |
| • Scientific equipment            | 15 years                  |
| • Electronic scientific equipment | 10 years                  |
| • Computer equipment              | 5 years                   |
| • Vehicles                        | 4 years                   |

### ASSET IMPAIRMENT

PPE and intangible assets are reviewed for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised in the SoCNE for the amount by which the carrying amount exceeds the recoverable amount.

The recoverable amount is the higher of fair value less costs to sell, and value in use. Value in use is assumed to equal the cost of replacing the service potential provided by the asset.

Any reversal of an impairment charge is recognised in the SoCNE to the extent that the original charge, adjusted for subsequent depreciation, was previously recognised, with any remaining amount recognised in the revaluation reserve.

## 1.5 INTANGIBLE NON-CURRENT ASSETS

---

Intangible assets are recognised for items costing £10,000 or more. They are carried at current value in existing use which is taken to be depreciated replacement cost.

Intangible assets are normally amortised over the following periods:

- Software and software licences 5-10 years

## 1.6 FINANCIAL ASSETS

---

### INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

Investments in joint ventures and associates are accounted for using the equity method of accounting; the investment in an associate or joint venture is initially recorded at cost and is subsequently adjusted to reflect STFC's share of the net profit or loss of the associate or joint venture.

## 1.7 FINANCIAL INSTRUMENTS

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STFC recognises and measures financial instruments in accordance with IAS39 *Financial Instruments: Recognition and Measurement* as interpreted by the FReM.

### TRADE AND OTHER RECEIVABLES

Trade and other receivables are classified as loans and receivables and initially recognised and carried at original invoice amount. Subsequently, an estimate for impairment is made when collection of the full amount is no longer probable and is offset against the original invoice amount. Bad debts are written off when identified.

### TRADE AND OTHER PAYABLES

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 STFC is established or when the corresponding assets or expenses are recognised.

### DERIVATIVE FINANCIAL INSTRUMENTS

Derivative financial instruments comprise forward contracts held to hedge STFC's exposure to foreign currency risk relating to payments due for membership to international research collaborations. The forward contract is designated as a cash flow hedge against the related membership commitment. Amounts accumulated in equity are recycled to the SoCNE in the periods when the hedged item affects the SoCNE.

## 1.8 CASH AND CASH EQUIVALENTS

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Cash and cash equivalents comprise cash in hand and bank balances.

## 1.9 EMPLOYEE BENEFITS

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Under IAS19 *Employee Benefits*, an entity is required to recognise short term employee benefits when an employee has rendered service in exchange for those benefits. Included in the financial statements under other accruals, is an accrual for the outstanding employee holiday entitlement at the year-end (undiscounted).

## 1.10 PENSIONS

---

Pension costs for the UKAEA Pension Scheme and the Research Councils Pension Scheme (RCPS) are recognised on the basis of contributions due or paid in year. Contribution rates are set based on actuarial advice so as to spread the cost of the pensions over the employees' expected working lives.

Liabilities for the payment of future benefits are the responsibility of the UKAEA Pension Scheme and the RCPS. Accordingly, these are not included in the financial statements.

Both the UKAEA Pension Scheme and the RCPS are multi-employer schemes and STFC is unable to identify its share of the underlying assets and liabilities.

## 1.11 EARLY DEPARTURE COSTS

---

STFC is required to meet the additional cost of benefits beyond the normal PCSPS benefits in respect of employees who retire early. Under IAS19 *Employee Benefits*, STFC provides in full for this cost when an early retirement programme has been announced and is binding. Early departure costs are discounted using HM Treasury's published discount rates.

## 1.12 PROVISIONS

---

Provisions are recognised and measured in accordance with IAS37 *Provisions, Contingent Liabilities and Contingent Assets*. Where the time value of money is material, provisions are discounted to present value using HM Treasury's real discount rates.

## 1.13 GRANT-IN-AID AND OTHER INCOME

---

Grant-in-aid is recognised as a financing flow and thus credited to the General Reserve

Grant Income and funding for collaborative projects is recognised as income over the period in which STFC recognises the related costs for which the grant or funding is intended to compensate. Grant income can only be deferred if the contract or agreement includes key conditions relating to the repayment of surplus funds.

Other operating income is shown net of trade discounts; value added tax and other taxes. Revenue is recognised when goods are delivered and title has passed, and services in the accounting period in which the service is rendered.

## 1.14 RESEARCH AND DEVELOPMENT

---

As a research organisation the majority of STFC's expenditure on research and development does not meet the capitalisation criteria of IAS38 *Intangible Assets*, and is therefore charged to the SoCNE when incurred.

## 1.15 RESEARCH GRANTS PAYABLE

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The majority of research grants and fellowships are paid by STFC on an instalment basis in accordance with an agreed payment profile. Where the profile indicates an unclaimed and/or unpaid amount exists at the Statement of Financial Position date, such sums are accrued in the financial statements.

The majority of studentship grants are paid on an instalment basis in advance. Stipends are paid directly to the student on a quarterly basis and fee payments are made in two equal payments to the institutions.

## 1.16 OWNERSHIP OF EQUIPMENT PURCHASED WITH STFC RESEARCH GRANTS

---

Equipment purchased by an institution with research grant funds supplied by STFC belongs to the institution and is not therefore the equipment of the Council. Such equipment is excluded from these financial statements.

## 1.17 INSURANCE

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As a public body, STFC does not generally insure. However, STFC has decided, with the agreement of BEIS, that risks relating to certain commercial contracts entered into by the Council should be commercially insured. Insurance premiums are charged to the SoCNE.

## 1.18 FOREIGN CURRENCY

---

STFC applies IAS21 *The Effects of Changes in Foreign Exchange Rates*, and transactions that are denominated in a foreign currency are translated into sterling at the rate of exchange ruling on the date of each transaction, except where rates do not fluctuate significantly, in which case an average rate for a period is used. Monetary assets and liabilities denominated in foreign currencies at the Statement of Financial Position date are retranslated at the rates of exchange ruling at that date. The translation differences are recognised in the SoCNE.

## 1.19 VAT

---

Value Added Tax (VAT) is accounted for in the accounts, in that amounts are shown net of VAT except:

- Irrecoverable VAT is charged to the SoCNE, and included under the relevant expenditure heading
- Irrecoverable VAT on the purchase of an asset is included in additions.

The net amount due to, or from, HM Revenue and Customs in respect of VAT is included within payables and receivables on the Statement of Financial Position.

## 1.20 NOTIONAL CHARGE FOR UK SBS LIMITED SERVICES

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When the ownership of the UK SBS transferred from the Research Councils to BEIS, the cost of the UK SBS's services to STFC ceased to be a direct charge and instead was deducted from STFC's allocation. In order to reflect the cost of using UK SBS's services in the annual accounts, a notional charge has been shown as an item of operating expenditure on the Statement of Comprehensive Net Expenditure and added back after Net expenditure for the year.

## 1.21 ACCOUNTING ESTIMATES AND JUDGEMENTS

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The preparation of financial statements requires management to make judgements, 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 for the reporting period.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances at the reporting date.

The estimates and judgements that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are:

- Valuation of property, plant and equipment (PPE). PPE are revalued every five years and are revised in the intervening years by applying appropriate indices.
- Calculation of the decommissioning costs for STFC facilities. The calculations are based on estimates, provided by professional valuation, of the current cost of the work to be undertaken, the timing of the decommissioning, the profiling of the expenditure and assumptions regarding inflation rates. To reduce the risk of material misstatement, the estimates and assumptions are reviewed annually
- Calculation of the decommissioning provision for the ILL. STFC's share of the ILL decommissioning provision is taken from the ILL financial statements. The provision was re-



evaluated in 2016 by the Commissariat à l'Énergie Atomique (CEA) using information provided by ILL management.

## 1.22 NEW ACCOUNTING STANDARDS ADOPTED IN THE YEAR AND FREM CHANGES

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No new accounting standards were incorporated into the FReM in 2017-18.

## 1.23 NEW STANDARDS, INTERPRETATIONS AND AMENDMENTS NOT YET ADOPTED

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The following standards will be applied to and by UKRI when adopted by the FReM: IFRS 9 *Financial Instruments*, IFRS 15 *Revenue from Contracts with Customers* and IFRS 16 *Leases*.

IFRS 9 *Financial Instruments* is being introduced to replace IAS39 *Financial Instruments: Recognition and Measurement*. IFRS 9 simplifies the classification and measurement of financial assets and amends when and how impairments are calculated and reported, moving from an incurred loss to an expected loss model. This will result in impairments being recognised earlier than under IAS39.

IFRS 15 *Revenue from Contracts with Customers* replaces IAS18 *Revenue* and IAS11 *Construction Contracts*, unifying the concepts in these two standards into a single model to recognise revenue once performance obligations under a contract are satisfied.

IFRS 16 *Leases* will replace IAS17 *Leases*. IFRS 16 amends the accounting for lessees, removing the distinction between operating leases and finance leases. IFRS 16 requires all leases, with terms over 12 months, to be recognised as finance leases. This will result in the recognition of a right-to-use asset, measured at the present value of future lease payments, and a matching liability in the Statement of Financial Position.

IFRS 9 is not expected to have a material impact on STFC's financial statements. The impact of IFRS 15 and IFRS 16 is still to be determined and may be dependent on the interpretation of these standards into the FReM.

## 2. REPORTING BY OPERATING SEGMENT

STFC reports its expenditure by operating segment in accordance with IFRS 8 *Operating Segments*.

### SEGMENTAL ANALYSIS OF NET OPERATING EXPENDITURE BY BUSINESS UNIT

#### FOR THE YEAR TO 31 MARCH 2018

	Programmes	National Laboratories	Business & innovation	Corporate services	Finance	SPC	Total
	£000	£000	£000	£000	£000	£000	£000
<b>Expenditure</b>							
Staff costs	5,573	79,988	3,674	11,790	3,158	3,712	107,895
Purchase of goods and services	188,566	53,911	4,148	20,315	415	1,541	268,896
Research grants and other research support	232,874	29,924	401	4	-	104	263,307
Other operating expenditure	-	-	(6,128)	-	18,924	-	12,796
Depreciation and impairment charges	-	-	-	-	90,501	-	90,501
Provision expense	-	138	-	-	17,822	-	17,960
Notional charge for UK SBS Ltd services	-	-	-	-	4,178	-	4,178
<b>Total operating expenditure</b>	<b>427,013</b>	<b>163,961</b>	<b>2,095</b>	<b>32,109</b>	<b>134,998</b>	<b>5,357</b>	<b>765,533</b>
<b>Income</b>							
Income from operating activities	(2,220)	(65,138)	(4,116)	(7,738)	(292)	(353)	(79,857)
<b>Net operating expenditure / (income)</b>	<b>424,793</b>	<b>98,823</b>	<b>(2,021)</b>	<b>24,371</b>	<b>134,706</b>	<b>5,004</b>	<b>685,676</b>

**FOR THE YEAR TO 31 MARCH 2017**

	Programmes	National Laboratories	Business & innovation	Corporate services	Finance	SPC	Total
	£000	£000	£000	£000	£000	£000	£000
<b>Expenditure</b>							
Staff costs	5,104	76,985	3,537	11,443	3,170	3,848	104,087
Purchase of goods and services	172,549	53,922	4,382	20,420	(416)	1,647	252,504
Research grants and other research support	219,614	38,740	1,321	10	-	190	259,875
Other operating expenditure	-	-	-	-	31,283	-	31,283
Depreciation and impairment charges	-	-	308	-	95,210	-	95,518
Provision expense	-	-	(11)	-	3,617	-	3,606
Notional charge for UK SBS Ltd services	-	-	-	-	4,292	-	4,292
<b>Total operating expenditure</b>	<b>397,267</b>	<b>169,647</b>	<b>9,537</b>	<b>31,873</b>	<b>137,156</b>	<b>5,685</b>	<b>751,165</b>
<b>Income</b>							
Income from operating activities	(2,848)	(63,526)	(3,178)	(6,848)	(505)	(381)	(77,286)
<b>Net operating expenditure</b>	<b>394,419</b>	<b>106,121</b>	<b>6,359</b>	<b>25,025</b>	<b>136,651</b>	<b>5,304</b>	<b>673,879</b>

STFC's assets and liabilities are shared across all parts of the organisation and therefore not separately identified and disclosed.

	Revenue by location of customers		Non-current assets by location of assets	
	2017-18 £000	2016-17 £000	2017-18 £000	2016-17 £000
UK	48,180	43,814	1,307,473	1,226,256
The rest of the world	31,677	33,472	42,094	45,374
<b>Total</b>	<b>79,857</b>	<b>77,286</b>	<b>1,349,567</b>	<b>1,271,630</b>

## SUMMARY OF THE SEGMENTS:

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### PROGRAMMES

This segment covers STFC's science and technology strategy, science operations and planning (including STFC's processes for peer review), world-class research training programme and management, including UK membership of and access to international facilities of CERN, European Southern Observatory (ESO), ILL and ESRF and those being developed (CTA, DUNE, ESS, FAIR, SKA and XFEL), as well as programmes in education, training and public engagement. It also covers the Isaac Newton Group of Telescopes on La Palma, Canary Islands.

### NATIONAL LABORATORIES

This segment covers the management and operation of STFC's world class national laboratories located at Rutherford Appleton Laboratory, Daresbury Laboratory, the Chilbolton Observatory and United Kingdom Astronomy Technology Centre (UK ATC), plus the provision of access to world-class experimental facilities and technologies. The laboratories are home to the science, facility and technology departments of accelerator science and technology, particle physics and space, scientific computing, technology, ISIS and CLF.

### BUSINESS AND INNOVATION

This segment covers the delivery and development of the impact potential of STFC's expertise and facilities, through business development, innovation and campus development, the protection and exploitation of the intellectual property arising from the work of STFC laboratories through spin-out companies and the effective transfer of knowledge between STFC, universities and other organisations.

### CORPORATE SERVICES

This segment covers STFC's support and operational functions covering CICT infrastructure and support at Rutherford Appleton Laboratory and Daresbury Laboratory, estates management, health, safety and environment, human resources and security. It also covers the legal and commercial services for the whole organisation.

### FINANCE

This segment covers STFC's overall budgeting and associated financial planning, financial management, financial support and financial accounting processes within the Council. It also covers key governance activities across the Council, including risk management.

### STRATEGY, PLANNING AND COMMUNICATIONS (SPC)

This segment covers the delivery of STFC's national and international strategic agenda, stakeholder management, performance and impact reporting, international relations, effective internal and external communications which encompasses STFC's activities in marketing, public affairs, media relations, events management, corporate web services and corporate publication.

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### 3. STAFF COSTS

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	2017-18 £000	2016-17 £000
Wages and salaries	78,976	76,663
Social security costs	9,400	8,769
Other pension costs	19,519	18,655
<b>Total staff costs</b>	<b>107,895</b>	<b>104,087</b>

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

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### 4. INCOME

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	2017-18 £000	2016-17 £000
<b>Operating income</b>		
Facilities access and development	(64,159)	(62,971)
Science programme and project work	(2,220)	(2,848)
Other income	(13,478)	(11,467)
<b>Total Operating income</b>	<b>(79,857)</b>	<b>(77,286)</b>

Operating income includes £4,193k (2016-17: £3,187k) received from the European Commission and £24,529k (2016-17: £20,052k) from BEIS and its partner organisations.

There are no external customers accounting for 10% or more of total revenue.

## 5. OPERATING EXPENDITURE

### 5.1 PURCHASE OF GOODS AND SERVICES

		2017-18	2016-17
	Note	£000	£000
International subscriptions	5.1.1	184,379	169,466
Rentals under operating leases		2,433	1,371
Accommodation		34,283	33,392
Consultancy		4,237	3,501
Finance and HR services		459	80
IT costs / support costs		10,300	9,626
Training and other staff costs		2,666	2,774
Restructuring costs		35	76
UK travel and subsistence		4,502	4,666
Overseas travel and subsistence		2,626	2,518
Telecommunications cost		1,291	526
Advertising and publicity		151	268
Media and design services		17	2
Audit fees	5.1.2	145	144
Professional subscriptions		241	164
Postage and freight		519	596
Catering services		3,190	4,186
Miscellaneous other costs		16,962	18,733
Losses and compensation		158	139
Other audit costs		302	276
<b>Total</b>		<b>268,896</b>	<b>252,504</b>

#### 5.1.1 INTERNATIONAL SUBSCRIPTIONS

	2017-18	2016-17
	£000	£000
European Organisation for Nuclear Research (CERN)	132,949	121,869
European Southern Observatory (ESO)	23,152	23,078
Institut Laue-Langevin (ILL)	17,807	16,610
European Synchrotron Radiation Facility (ESRF)	10,471	7,909
<b>Total</b>	<b>184,379</b>	<b>169,466</b>

#### 5.1.2 AUDIT FEES

Audit fees include £130k (2016-17: £130k) for the statutory audit of STFC and £15k (2016-17: £14k) for the statutory audit of SIL.

## 5.2 RESEARCH GRANTS AND OTHER RESEARCH SUPPORT

	2017-18 £000	2016-17 £000
<b>Research grants</b>		
Astronomy	42,610	42,761
Particle physics	41,080	46,500
Other	21,359	11,505
<b>Total research grants</b>	<b>105,049</b>	<b>100,766</b>
Post graduate training awards and fellowships	24,830	23,183
Other research costs	45,978	35,837
Joint venture funding	53,457	48,951
Contribution to construction of facilities	33,993	51,138
<b>Total</b>	<b>263,307</b>	<b>259,875</b>

Contribution to construction of facilities is comprised of STFC funding for the development of: XFEL £6,757k (2016-17: £20,074k), ESS £7,020k (2016-17: £17,469), EELT £14,616k (2016-17: £9,085k), SKA £3,490k (2016-17: £4,510k) and particle detectors £2,110k (2016-17: nil).

## 5.3 OTHER OPERATING EXPENDITURE

	2017-18		2016-17	
	£000	£000	£000	£000
	STFC	Consolidated	STFC	Consolidated
(Profit)/Loss on disposal of PPE	(3)	(3)	4	4
Profit on disposal of investments	(6,128)	(6,128)	-	-
Share of losses of joint ventures	-	18,927	-	31,279
<b>Total</b>	<b>(6,131)</b>	<b>12,796</b>	<b>4</b>	<b>31,283</b>

## 5.4 DEPRECIATION AND IMPAIRMENT CHARGES

	2017-18 £000	2016-17 £000
Depreciation	78,929	69,587
Amortisation of intangible assets	6,086	10,639
Impairment of PPE	5,486	14,025
Impairment of financial assets	-	1,267
<b>Total</b>	<b>90,501</b>	<b>95,518</b>

## 5.5 PROVISION EXPENSE

	2017-18 £000	2016-17 £000
Decrease in bad debt provision	(180)	(11)
Increase in decommissioning provision	18,140	3,617
<b>Total</b>	<b>17,960</b>	<b>3,606</b>

## 6. PROPERTY PLANT AND EQUIPMENT

2017-18	Land	Buildings	Plant and equipment	Information technology	Assets under construction	Total
	£000	£000	£000	£000	£000	£000
<b>Cost or valuation</b>						
<b>At 1 April 2017</b>	<b>36,002</b>	<b>524,397</b>	<b>951,574</b>	<b>76,159</b>	<b>95,010</b>	<b>1,683,142</b>
Additions	-	-	11,676	-	80,341	92,017
Disposals	-	-	(1,558)	(952)	-	(2,510)
Impairments	34	(11)	(5,509)	-	-	(5,486)
Reclassifications	-	10,653	32,392	19,882	(74,381)	(11,454)
Revaluations	3,110	13,214	11,907	3,729	-	31,960
<b>At 31 March 2018</b>	<b>39,146</b>	<b>548,253</b>	<b>1,000,482</b>	<b>98,818</b>	<b>100,970</b>	<b>1,787,669</b>
<b>Depreciation</b>						
<b>Balance at 1 April 2017</b>	-	<b>(244,627)</b>	<b>(571,928)</b>	<b>(45,326)</b>	-	<b>(861,881)</b>
Charged in year	-	(15,199)	(48,621)	(15,109)	-	(78,929)
Disposals	-	-	1,558	952	-	2,510
Reclassifications	-	(1,497)	1,274	223	-	-
Revaluations	-	7,473	(6,746)	(1,871)	-	(1,144)
<b>At 31 March 2018</b>	-	<b>(253,850)</b>	<b>(624,463)</b>	<b>(61,131)</b>	-	<b>(939,444)</b>
<b>Carrying amount at 31 March 2018</b>	<b>39,146</b>	<b>294,403</b>	<b>376,019</b>	<b>37,687</b>	<b>100,970</b>	<b>848,225</b>
<b>Carrying amount at 31 March 2017</b>	<b>36,002</b>	<b>279,770</b>	<b>379,646</b>	<b>30,833</b>	<b>95,010</b>	<b>821,261</b>



2016-17	Land £000	Buildings £000	Plant and equipment £000	Information technology £000	Assets under construction £000	Total £000
<b>Cost or valuation</b>						
<b>At 1 April 2016</b>	<b>34,972</b>	<b>495,890</b>	<b>850,595</b>	<b>97,085</b>	<b>76,586</b>	<b>1,555,128</b>
Additions	-	-	14,126	-	67,542	81,668
Disposals	(177)	(530)	(2,236)	(20,488)	-	(23,431)
Impairments	-	(2)	(4,907)	(8,832)	-	(13,741)
Reclassifications	-	9,393	24,954	10,766	(49,118)	(4,005)
Revaluations	1,207	19,646	69,042	(2,372)	-	87,523
<b>At 31 March 2017</b>	<b>36,002</b>	<b>524,397</b>	<b>951,574</b>	<b>76,159</b>	<b>95,010</b>	<b>1,683,142</b>
<b>Depreciation</b>						
<b>Balance at 1 April 2016</b>	-	<b>(221,987)</b>	<b>(549,281)</b>	<b>(55,721)</b>	-	<b>(826,989)</b>
Charged in year	-	(13,943)	(41,888)	(13,756)	-	(69,587)
Disposals	-	530	2,235	15,486	-	18,251
Reclassifications	-	-	20	(20)	-	-
Revaluations	-	(9,227)	16,986	8,685	-	16,444
<b>At 31 March 2017</b>	-	<b>(244,627)</b>	<b>(571,928)</b>	<b>(45,326)</b>	-	<b>(861,881)</b>
<b>Carrying amount at 31 March 2017</b>	<b>36,002</b>	<b>279,770</b>	<b>379,646</b>	<b>30,833</b>	<b>95,010</b>	<b>821,261</b>
<b>Carrying amount at 31 March 2016</b>	<b>34,972</b>	<b>273,903</b>	<b>301,314</b>	<b>41,364</b>	<b>76,586</b>	<b>728,139</b>

- The net carrying amount of PPE held under finance lease was nil.
- Reclassifications are transfers between the asset categories. When assets under construction (AUC) are brought into use, they are reclassified from AUC to the appropriate category of property, plant and equipment or intangible assets.
- Disposals in 2016-17 include £5,000k net book value for computer equipment donated to DiRAC at Durham University.
- AUC comprises projects to build and improve site infrastructure, and to construct scientific facilities and instruments. Total AUC at 31 March 2018 includes ISIS £42,288k, JASMIN £7,799k and the Higgs Building £12,662k.
- Plant and equipment net book value at 31 March 2018 includes £9,393k (31 March 2017: £9,717k) for science facility decommissioning costs.
- Independent professional valuations are obtained for all property, plant and equipment every five years and are revised in the intervening years using appropriate indices.

Land and buildings at the Rutherford Appleton Laboratory were professionally valued as at 31 January 2018 by external valuers GVA Grimley Limited. The valuation has been prepared in accordance with the RICS Valuation – Global Standards 2017 and relevant HM Treasury accounting guidelines.

For properties that are owner occupied and are of a non-specialised nature, the basis of valuation is Fair Value, assuming ongoing operational use. For properties which are either owned but not occupied or have been declared surplus, these are also valued on the basis of Fair Value. In this context, Fair Value is generally taken to be the equivalent of Market Value. For properties which are owner occupied but are of a specialised nature where few, if any, open market transactions involving a continuation of the existing use occur then the Depreciated Replacement Cost (DRC) basis of valuation is appropriate in assessing Fair Value. DRC is used where there is no active market for the asset being valued – that is where there is no useful or relevant evidence of recent sales transactions due to the specialised nature of the asset.

Land and buildings at Daresbury Laboratory, Chilbolton Observatory and the UK ATC were independently revalued at 31 January 2014 and Polaris House was independently revalued at 31 December 2015.

Plant and machinery assets were independently revalued at 31 December 2016 by Hickman Shearer Ltd. As the majority of STFC assets are specialised in nature DRC was used to approximate fair value.

## 7. INTANGIBLE ASSETS

<b>2017-18</b>				
	<b>Information technology</b>	<b>Software licences</b>	<b>Assets under construction</b>	<b>Total</b>
	<b>£000</b>	<b>£000</b>	<b>£000</b>	<b>£000</b>
<b>Cost or valuation</b>				
<b>Balance at 1 April 2017</b>	<b>15,833</b>	<b>28,568</b>	<b>349</b>	<b>44,750</b>
Additions	-	17,105	-	17,105
Disposals	(5)	(18)	-	(23)
Reclassifications	4,542	(1,910)	8,822	11,454
Revaluations	255	467	-	722
<b>At 31 March 2018</b>	<b>20,625</b>	<b>44,212</b>	<b>9,171</b>	<b>74,008</b>
<b>Amortisation</b>				
<b>Balance at 1 April 2017</b>	<b>(6,577)</b>	<b>(8,697)</b>	<b>-</b>	<b>(15,274)</b>
Charged in year	(2,191)	(3,895)	-	(6,086)
Disposals	5	18	-	23
Reclassifications	(242)	242	-	-
Revaluations	(94)	(216)	-	(310)
<b>At 31 March 2018</b>	<b>(9,099)</b>	<b>(12,548)</b>	<b>-</b>	<b>(21,647)</b>
<b>Carrying amount at 31 March 2018</b>	<b>11,526</b>	<b>31,664</b>	<b>9,171</b>	<b>52,361</b>
<b>Carrying amount at 31 March 2017</b>	<b>9,256</b>	<b>19,871</b>	<b>349</b>	<b>29,476</b>

<b>2016-17</b>				
	<b>Information Technology</b>	<b>Software Licences</b>	<b>Assets under construction</b>	<b>Total</b>
	<b>£000</b>	<b>£000</b>	<b>£000</b>	<b>£000</b>
<b>Cost or valuation</b>				
<b>Balance at 1 April 2016</b>	<b>9,003</b>	<b>859</b>	<b>12,140</b>	<b>22,002</b>
Additions	4,576	14,365	-	18,941
Impairment	(275)	(9)	-	(284)
Reclassifications	2,445	13,351	(11,791)	4,005
Revaluations	84	2	-	86
<b>At 31 March 2017</b>	<b>15,833</b>	<b>28,568</b>	<b>349</b>	<b>44,750</b>
<b>Amortisation</b>				
<b>Balance at 1 April 2016</b>	<b>(3,927)</b>	<b>(692)</b>	<b>-</b>	<b>(4,619)</b>
Charged in year	(2,607)	(8,032)	-	(10,639)
Revaluations	(43)	27	-	(16)
<b>At 31 March 2017</b>	<b>(6,577)</b>	<b>(8,697)</b>	<b>-</b>	<b>(15,274)</b>
<b>Carrying amount at 31 March 2017</b>	<b>9,256</b>	<b>19,871</b>	<b>349</b>	<b>29,476</b>
<b>Carrying amount at 31 March 2016</b>	<b>5,076</b>	<b>167</b>	<b>12,140</b>	<b>17,383</b>

a. Independent professional valuations are obtained for all intangible assets every five years and are revised in the intervening years using appropriate indices.

b. Intangible assets were independently re-valued at 31 December 2016 by Hickman-Shearer.

## 8. DERIVATIVE FINANCIAL INSTRUMENTS

### DERIVATIVE FINANCIAL ASSETS

	31 March 2018 £000	31 March 2017 £000
Forward foreign exchange contracts - cash flow hedges: current	-	5,138

### DERIVATIVE FINANCIAL LIABILITIES

	31 March 2018 £000	31 March 2017 £000
Forward foreign exchange contracts - cash flow hedges	24,107	4,080
Of which:		
Current	12,179	-
Non-current	11,928	4,080

The notional principal amounts of outstanding forward foreign exchange contracts at 31 March 2018 were £356,746k (2017: £518,782k). Their fair value is £24,107k net liability (2017: £1,058k net asset).

The hedged forecast transactions denominated in foreign currency are expected to occur at various dates over the next two financial years. Gains and losses recognised in the general reserve on forward foreign exchange contracts as at 31 March 2018 are recognised in the SoCNE when the hedged forecast transactions affect the SoCNE.

## 9. INTERESTS IN JOINT VENTURES AND OTHER INVESTMENTS

### 9.1 INTERESTS IN JOINT VENTURES

Consolidated	DLSL £000	ILL £000	HSIC £000	DSIC £000	Total £000
<b>At 1 April 2016</b>	<b>364,823</b>	<b>37,891</b>	<b>7,697</b>	<b>968</b>	<b>411,379</b>
Investment additions	22,239	-	5,000	-	27,239
Revaluation / (impairment)	(8,086)	6,585	-	-	(1,501)
Share of joint venture profit / (loss)	(33,315)	-	2,041	(5)	(31,279)
<b>At 31 March 2017</b>	<b>345,661</b>	<b>44,476</b>	<b>14,738</b>	<b>963</b>	<b>405,838</b>
Investment additions	14,655	-	3,200	-	17,855
Revaluation / (impairment)	30,790	(3,272)	-	-	27,518
Share of joint venture profit / (loss)	(30,515)	-	11,192	396	(18,927)
<b>At 31 March 2018</b>	<b>360,591</b>	<b>41,204</b>	<b>29,130</b>	<b>1,359</b>	<b>432,284</b>
<b>STFC</b>					
<b>At 1 April 2016</b>	<b>513,397</b>	<b>1</b>	<b>8,099</b>	<b>1,054</b>	<b>522,551</b>
Investment additions	22,239	-	5,000	-	27,239
<b>At 31 March 2017</b>	<b>535,636</b>	<b>1</b>	<b>13,099</b>	<b>1,054</b>	<b>549,790</b>
Investment additions	14,655	-	3,200	-	17,855
<b>At 31 March 2018</b>	<b>550,291</b>	<b>1</b>	<b>16,299</b>	<b>1,054</b>	<b>567,645</b>

The revaluation of investment in ILL relates to the movement in STFC share of the ILL capital investment reserve. The adjustment is taken to revaluation reserve.

The revaluation of investment in Diamond Light Source Limited (DLSL) relates to the adjustment required to account for differences in accounting policy between STFC and DLSL. The adjustment is taken to revaluation reserve.

## DLSL

STFC has an 87.7% (31 March 2017: 87.6%) interest in DLSL, a company incorporated and operating in the UK. DLSL is a synchrotron science facility. Its purpose is to produce intense beams of light to be used in scientific research, and the principal activities are research and experimental development on natural sciences and engineering.

DLSL is a separate structured vehicle under the joint control of STFC and the Wellcome Trust (WT). STFC has a residual interest in its net assets. Under IFRS 11 this joint arrangement is classified as a joint venture and has been included in the consolidated accounts using the equity method.

STFC holds 86% (31 March 2017: 86%) of the ordinary share capital and 100% (31 March 2017: 100%) of the non-voting redeemable shares in DLSL. The purpose of the redeemable shares is to provide for the funding of irrecoverable VAT incurred during the construction and operation of the synchrotron facility.

DLSL is consolidated using the equity method based on STFC's net share of the ordinary and preference shares and after adjusting DLSL financial statements for differences in accounting policy.

Summarised financial information relating to the joint venture is presented below:

	31 March 2018	31 March 2017
	£'000	£'000
Current assets	20,242	20,944
Non-current assets	384,784	392,004
Current liabilities	18,350	16,401
Non-current liabilities	61,394	54,182
<b>Net assets</b>	<b>325,282</b>	<b>342,365</b>
Included in the above amounts are:		
Cash and cash equivalents	12,165	9,918
Revenues	68,162	60,266
Loss from continuing operations	34,804	38,016
Included in the above amounts are:		
Depreciation and amortisation	36,251	37,657

STFC's share of DLSL capital commitments is £8,981k (31 March 2017: £4,725k)

## INSTITUT LAUE-LANGEVIN (ILL)

STFC has a 33% shareholding and 27.5% net interest (31 March 2017: 27.5% net interest) in the ILL; an international research centre for neutron science, incorporated and operating in France. STFC is the UK representative and, along with the French and German Foreign Ministries, jointly controls the ILL. The ILL is a separate structured vehicle and STFC has a residual interest in its net assets. Under IFRS 11 this joint arrangement is classified as a joint venture and has been included in the consolidated accounts using the equity method.

ILL prepares accounts to 31 December (in euros); they are produced in accordance with French accounting rules and principles.

Summarised financial information relating to the joint venture is presented below:

	<b>31 December 2017</b>	<b>31 December 2016</b>
	(STFC accounts 2017-18 £'000)	(STFC accounts 2016-17 £'000)
Current assets	273,790	256,155
Non-current assets	136,901	133,207
Current liabilities	64,427	53,616
Non-current liabilities	181,963	173,782
<b>Net assets</b>	<b>164,301</b>	<b>161,964</b>
Included in the above amounts are:		
Cash and cash equivalents	62,720	52,345
Revenues	92,566	116,337
Profit from continuing operations	-	-
Included in the above amounts are:		
Depreciation and amortisation	9,588	9,014

#### HARWELL SCIENCE AND INNOVATION CAMPUS PUBLIC SECTOR LIMITED PARTNERSHIP (HSIC PUBSP)

STFC has a 46% (31 March 2017: 51%) interest in HSIC PubSP, a company incorporated and operating in the UK. Management and control of PubSP is jointly shared by STFC and the UKAEA, with financial interests reflecting the relative contributions of the partners; under IFRS 11 the joint arrangement is classified as a joint venture and is equity accounted. The principal activity of the joint venture is to manage and develop the Harwell Oxford Campus as a partner in the Harwell Science and Innovation Campus LP.

Summarised financial information relating to the joint venture is presented below:

	<b>31 March 2018</b>	<b>31 March 2017</b>
	£'000	£'000
Current assets	15,062	12,459
Non-current assets	46,871	16,438
Current liabilities	38	16
Non-current liabilities	-	-
<b>Net assets</b>	<b>61,895</b>	<b>28,881</b>
Included in the above amounts are:		
Cash and cash equivalents	11,841	12,198
Revenues	-	-
Profit from continuing operations	24,332	3,962
Included in the above amounts are:		
Share of profit in joint venture	23,714	3,746
Interest income	682	269

## DARESBURY SIC (PUBSEC) LLP

STFC has a 50% (31 March 2017: 50%) interest in Daresbury SIC (Pubsec) LLP, a company incorporated and operating in the UK. Daresbury SIC (Pubsec) LLP is a partnership between STFC and Halton Borough Council in which management and control is shared equally between the partners; under IFRS 11 the joint arrangement is classified as a joint venture and is equity accounted. The principal activity of the joint venture is to promote and develop the International Science Park at Daresbury as a partner in the Daresbury Science and Innovation Campus LLP.

Summarised financial information relating to the joint venture is presented below:

	31 March 2018	31 March 2017
	£'000	£'000
Current assets	610	807
Non-current assets	1,055	1,055
Current liabilities	9	997
Non-current liabilities	-	-
<b>Net assets</b>	<b>1,656</b>	<b>865</b>
Included in the above amounts are:		
Cash and cash equivalents	610	807
Revenues	-	-
Profit / (loss) from continuing operations	791	(7)
Included in the above amounts are:		
Interest income	-	1

## 9.2 OTHER INVESTMENTS

### UK SHARED BUSINESS SERVICES LIMITED (REGISTERED IN ENGLAND)

STFC holds one Non-Government Department (NGD) £1 share in UK Shared Business Services Ltd. BEIS holds one Government department (GD) £1 share carrying 51% of the votes. All other stakeholders, including STFC, each hold 1NGD share with a combined vote of 49%.

### INTERNATIONAL COLLABORATIONS

STFC is a member of CERN, ESO, and ESRF and has voting powers in each of these organisations. STFC holds 10.5% (31 March 2017: 14%) of the common shares in ESRF.

STFC does not have joint control or exercise significant influence over CERN, ESO or ESRF hence they are not considered to be joint arrangements (IFRS 11) or associates (IAS 28). The contributions paid by STFC to these organisations are included in the Statement of Comprehensive Net Expenditure.

### THE UK INNOVATION & SCIENCE SEED FUND LP (UK ISSF)

The UK ISSF is an independently managed capital venture fund established to invest in technologies developed from publicly funded research. STFC is a limited partner in the fund and has provided £115.5m in total as a capital contribution to the fund. It was previously called the Rainbow Seed Fund until a name change effective 8 February 2018

## 10. OTHER FINANCIAL ASSETS

	Private sector loans	Private equities	Total
	£000	£000	£000
<b>Balance at 1 April 2016</b>	<b>11,395</b>	<b>681</b>	<b>12,076</b>
Impairment	(1,267)	-	(1,267)
<b>Balance at 31 March 2017</b>	<b>10,128</b>	<b>681</b>	<b>10,809</b>
Additions	-	550	550
Disposals	-	(404)	(404)
Revaluation	-	1,793	1,793
<b>Balance at 31 March 2018</b>	<b>10,128</b>	<b>2,620</b>	<b>12,748</b>

### Analysed between current and non-current assets:

	31 March 2018 £000	31 March 2017 £000
Due within 12 months	-	-
Due after 12 months	12,748	10,809
<b>Total</b>	<b>12,748</b>	<b>10,809</b>

Private sector loans is £10,128k (31 March 2017: £10,128k) due from Daresbury SIC LLP. The interest on the loan is 3% per annum.

### STFC INNOVATIONS LIMITED (SIL)

STFC Innovations Limited, a company registered and operating in the UK, is a wholly owned subsidiary of STFC. SIL was established to manage and commercially exploit intellectual property owned by STFC for the benefit of the UK economy in accordance with HM Government policy.

SIL is consolidated in STFC's financial statements in accordance with IFRS 10. In 2017-18 SIL recorded a profit of £5,748k (2016-17: £552k loss). Its net deficit of capital and reserves at 31 March 2018 was £1,582k (31 March 2017: £9,059k).

## UNLISTED INVESTMENTS HELD BY SIL

At 31 March 2018, SIL held interests in the following undertakings:

	Country of incorporation	Class of shares held	Proportion held %	Aggregate of capital & reserves £000	Profit/(loss) for the year £000
Oxsensis Limited	England and Wales	Ordinary	15.6	(7,416)	(3,037)
Microvisk Limited	England and Wales	Ordinary	0	(482)	(1,332)
Quantum Detectors Limited	England and Wales	Ordinary	90	416	206
The Electrospinning Company Limited	England and Wales	Ordinary	17.7	722	(322)
Scitech Precision Limited	England and Wales	Ordinary	100	214	(83)
Teratech Components Limited	England and Wales	Ordinary	49.9	596	136
KEIT Limited	England and Wales	Ordinary	11.9	1,243	(1,106)
L3 Technology Limited	England and Wales	Ordinary	0.03	(2,312)	(981)
Exa Informatics Limited	England and Wales	Ordinary	0	(3)	(2)
Mirico Limited	England and Wales	Ordinary	30.3	(39)	623
VivaMOS Limited	England and Wales	Ordinary	59.6	(210)	(93)

At 31 March 2017, SIL held interests in the following undertakings:

	Country of incorporation	Class of shares held	Proportion held %	Aggregate of capital & reserves £000	Profit/(loss) for the year £000
Oxsensis Limited	England and Wales	Ordinary	3.1	(7,416)	(3,037)
Microvisk Limited	England and Wales	Ordinary	0.2	(482)	(1,332)
Cobalt Light Systems Limited	England and Wales	Ordinary	20.2	4,173	28
Quantum Detectors Limited	England and Wales	Ordinary	90	208	(193)
The Electrospinning Company Limited	England and Wales	Ordinary	17.3	412	(225)
Scitech Precision Limited	England and Wales	Ordinary	100	297	61
Teratech Components Limited	England and Wales	Ordinary	49.9	460	157
KEIT Limited	England and Wales	Ordinary	15.9	926	(1,009)
L3 Technology Limited	England and Wales	Ordinary	0.5	(125)	(125)
Exa Informatics Limited	England and Wales	Ordinary	21.7	(3)	(3)
Mirico Limited	England and Wales	Ordinary	30.3	944	(56)
VivaMOS Limited	England and Wales	Ordinary	62.6	(117)	(118)



## 11. TRADE AND OTHER RECEIVABLES

	31 March 2018	31 March 2017
	£000	£000
<b>Amounts falling due within one year:</b>		
Trade receivables	13,159	11,287
Other receivables	1,746	675
Prepayments	38,187	34,798
Accrued income	23,283	23,987
<b>Total</b>	<b>76,375</b>	<b>70,747</b>
<b>Amounts falling due after more than one</b>		
Other receivables	321	531
Prepayments	3,628	3,715
<b>Total</b>	<b>3,949</b>	<b>4,246</b>
<b>Total Receivables</b>	<b>80,324</b>	<b>74,993</b>

Included within Trade receivables is £3,049k for amounts due from BEIS and its partner organisations (2017: £3,880k).

Included within accrued income is £708k (2017: £1,544k) of income relating to EU funding.

Trade receivables are net of a provision for impairment:

	31 March 2018	31 March 2017
	£'000	£'000
<b>Provision at 1 April</b>	<b>564</b>	<b>575</b>
Charged to SCNE	307	487
Utilised during the period	(3)	(139)
Released during the period	(484)	(359)
<b>Provision at 31 March</b>	<b>384</b>	<b>564</b>

At 31 March 2018 trade receivables of £3,824k (31 March 2017: £2,669k) were past due but not impaired. The ageing analysis of these receivables is as follows:

	31 March 2018	31 March 2017
	£'000	£'000
0 – 60 days past due	2,033	2,577
61 – 360 days past due	1,785	92
>360 days past due	6	-
	<b>3,824</b>	<b>2,669</b>

There are no indicators that debtors will not meet their payment obligations in respect of the net amount of trade receivables recognised in the Statement of Financial Position.

## 12. CASH AND CASH EQUIVALENTS

	31 March 2018	31 March 2017
	£000	£000
<b>Balance at 1 April</b>	<b>246</b>	<b>433</b>
Net change in cash and cash equivalent balances	9,207	(187)
<b>Balance as 31 March</b>	<b>9,453</b>	<b>246</b>
<b>The following balances were held at 31 March:</b>		
The Government Banking Service (GBS)	1,798	(290)
Commercial banks and cash in hand	7,655	536
<b>Total</b>	<b>9,453</b>	<b>246</b>

## 13. TRADE PAYABLES AND OTHER CURRENT LIABILITIES

	31 March 2018	31 March 2017
	£000	£000
<b>Amounts falling due within one year:</b>		
VAT	-	470
Other taxation and social security	2,263	2,204
Trade payables	10,783	23,536
Other payables	6,788	7,876
Accruals	55,272	44,734
Deferred income	24,516	16,705
<b>Total</b>	<b>99,622</b>	<b>95,525</b>
<b>Amounts falling due after more than one year:</b>		
Other payables	465	649
<b>Total</b>	<b>465</b>	<b>649</b>
<b>Total payables</b>	<b>100,087</b>	<b>96,174</b>

## 14. PROVISIONS FOR LIABILITIES AND CHARGES

	31 March 2018	31 March 2017
	£000	£000
<b>Balance at 1 April</b>	<b>102,233</b>	<b>96,854</b>
Provided in the year	-	3,617
Provisions not required written back	(3,666)	-
Movement due to change in the discount rate	21,806	-
Provision utilised	(138)	-
Unwinding of discount	1,342	1,762
<b>Balance at 31 March</b>	<b>121,577</b>	<b>102,233</b>

At 31 March 2018 the value of the undiscounted provision was £306,054k (31 March 2017: £300,565k).

## ANALYSIS OF EXPECTED TIMING OF DISCOUNTED CASH FLOWS

	31 March 2018	31 March 2017
	£000	£000
Due within one year	2,079	6,400
<b>Non-current liabilities:</b>		
Due later than one year and not later than five	6,404	7,804
Due later than five years	113,094	88,029
<b>Total non-current liabilities</b>	<b>119,498</b>	<b>95,833</b>
<b>Total</b>	<b>121,577</b>	<b>102,233</b>

	31 March 2018	31 March 2017
	£000	£000
<b>Analysis of provisions:</b>		
<b>Decommissioning:</b>		
ISIS	69,222	46,246
ILL	39,144	36,192
Other	962	916
Total Decommissioning provision	109,328	83,354
Removal of ISIS legacy waste	12,249	18,879
<b>Total provisions</b>	<b>121,577</b>	<b>102,233</b>

## DECOMMISSIONING COSTS

STFC provides for the estimated costs of decommissioning its science facilities and its share of the estimated decommissioning costs for the joint venture ILL. For STFC-owned facilities, the estimated costs of decommissioning are discounted at rates based on HM Treasury's real discount rates which range from -2.42% to -1.56%, depending on when the payment is expected to occur.

STFC plans to decommission the ISIS pulsed neutron source and the associated Second Target Station at Rutherford Appleton Laboratory at the end of its anticipated operating life in 2040. In preparing the best estimate of the provision required to settle the decommissioning obligation, it is recognised that there is a significant degree of inherent uncertainty in the future cost estimates. Given the long-term nature of the provision, even small changes to timing or costs could significantly impact the value of the provision. There are currently three main areas of uncertainty:

- When the facility might reach the end of its anticipated operating life – although the most likely estimate is 2040, it is possible that the life of the facility could be extended were future investment to be made, or brought forward if the demand for the facility falls against current expectations.
- The length of time over which the necessary programme of work will be delivered – we have estimated the full process will take 55 years from 2040 to 2095 but this estimate could be revised in the future as certainty increases over the decommissioning work that needs to be undertaken.
- Regulatory or technological changes that could impact the work to be undertaken to decommission and clean up the site – this could require a different approach to be taken from the current plan. More onerous regulatory requirements could result in a higher than expected cost, whilst technological efficiencies could decrease the anticipated costs.

Removal of ISIS legacy waste is a provision for the disposal of ISIS and other STFC radioactive waste now required after a change in Environment Agency guidance in relation to re-classification of legacy stored radioactive materials as waste. This provision covers a 11 year period from 2018 to 2029 and has been calculated based on STFC's long experience of radioactive waste disposal, contracts in place at present, and advice taken from a professional quantity surveyor in relation to the building of a new storage and waste processing facility. There is uncertainty relating to the requirements of the EA licence, timing of activities and the characterisation of the waste at time of disposal. The main sensitivity is around the level of radioactivity of the waste at the time of disposal; the cost of disposal varies according to the category of waste. The estimate is based on currently expected levels of radioactivity. The cost of waste disposal could range between £9 million and £16 million at current prices.

The ILL decommissioning provision is STFC's share (33%) of the decommissioning provision included in the ILL accounts year ended 31 December 2017. The provision was re-evaluated in 2016 based on reports produced by the CEA applying the methodology used for the setting-up of financial provisions for the CEA's dedicated "civil" fund. It assumes a cessation of operations in 2031 with demolition in 2037.

## 15. CAPITAL AND OTHER COMMITMENTS

### 15.1 CAPITAL COMMITMENTS

	31 March 2018	31 March 2017
	£000	£000
Contracted capital commitments not otherwise included in these financial statements:		
Property, plant and equipment	33,212	36,985
Intangible assets	25,386	38,984
<b>Total</b>	<b>58,598</b>	<b>75,969</b>

### 15.2 OPERATING LEASES

The minimum amounts payable under non-cancellable lease agreements are as follows:

	31 March 2018	31 March 2017
	£'000	£'000
Not later than one year	600	118
Later than one year and not later than five years	1,960	6
Later than five years	980	-
<b>Total</b>	<b>3,540</b>	<b>124</b>

From 1 April 2017 STFC entered into an 8 year lease agreement with Daresbury SIC LLP to acquire the Hartree Centre, located on the Sci-Tech Daresbury campus, at an annual cost of £490k per annum.

### 15.3 OPERATING LEASES: LESSOR

The minimum amounts receivable under non-cancellable lease agreements are as follows:

	31 March 2018	31 March 2017
	£'000	£'000
Not later than one year	2,238	1,855
Later than one year and not later than five years	1,500	1,610
Later than five years	-	520
<b>Total</b>	<b>3,738</b>	<b>3,985</b>

The operating leases relate to tenancy agreements. The standard termination clause is three months.

## 15.4 INTERNATIONAL SUBSCRIPTIONS

STFC had the following commitments in respect of its membership to international collaborations:

Organisation	Within one year £000	Later than one year and not later than five years £000	Later than five years £000	Total 31 March 2018 £000	Total 31 March 2017 £000
CERN	145,699	88,567	-	234,266	214,588
ESO	26,206	13,440	-	39,646	35,276
ESRF	8,704	31,983	-	40,687	50,338
ILL	18,648	79,189	15,385	113,222	128,997
XFEL	2,886	2,886	-	5,772	-
<b>Total</b>	<b>202,143</b>	<b>216,065</b>	<b>15,385</b>	<b>433,593</b>	<b>429,199</b>

International collaborations are established to share the cost of building and running major research facilities. The management, regulation and governance of a collaboration being set down in an agreement signed up to by all members. This will include a period of notice of withdrawal from the collaboration. The political nature of these arrangements is such that any withdrawal would be negotiated at government level. STFC has no current intention to withdraw from its membership of CERN, ESO, ESRF and ILL and in all cases would wish to honour research commitments made.

CERN and ESO require a minimum notice period of 12 months from the end of the current calendar year.

In the case of ESRF and ILL the UK has signed up to international conventions which are periodically reviewed.

The current ESRF Convention runs until the end of 2022. Notice can be given up to 31 December 2019 for withdrawal after 31 December 2022.

For ILL, the fifth protocol of the Intergovernmental Convention was signed on 1 July 2013 and will remain in force until 31 December 2023. Thereafter it shall be tacitly extended from year to year unless any of the Governments gives written notification to the other Governments of its intention to withdraw from the Convention. Any such withdrawal will take effect upon the expiry of two years from the date of receipt of the notification by any of the other members or on such later date as may be specified in the notification.

The UK joined XFEL on 19 March 2018. The UK has an initial review period during which it has the option to withdraw without penalty on 31 March 2020 after giving one year's written notice. STFC will pay the UK's contribution to XFEL's operating and construction costs.

## 15.5 GRANT COMMITMENTS

STFC had the following grant commitments at the balance sheet date:

	Within one year £000	Within two to five years £000	Later than five years £000	Total 31 March 2018 £000	Total 31 March 2017 £000
Research grants and fellowships	101,929	92,345	-	194,274	201,169

Grant commitments exclude grants that are paid by STFC on behalf of the UK Space Agency as they are reimbursed.

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## 16. CONTINGENT LIABILITIES

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### 16.1 CONTINGENT LIABILITIES DISCLOSED UNDER IAS37 - QUANTIFIABLE

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STFC had the following quantifiable contingent liabilities as at 31 March 2017:

- a. £13,747k (31 March 2017: £14,060k) in respect of STFC share of ILL unfunded provisions for staff related costs (e.g. early retirement) and costs associated with reprocessing irradiated fuel elements. As there has been no past obligating event these costs are treated as a contingent liability in accordance with IAS37.
- b. £1,686k (31 March 2017: £2,187k) in respect of ESRF decommissioning costs associated with the dismantling of the facility and infrastructures. Decommissioning occurs on winding up of ESRF. If exit by the UK (or any other member) results in ESRF being wound up, the members are required to arrange for decommissioning of ESRF's plant and buildings and to meet the costs of doing so in proportion to their share of capital at the time of dissolution. As there has been no past obligating event these costs are treated as a contingent liability in accordance with IAS37.
- c. There is an on-going claim against STFC by a former employee for unfair dismissal and discrimination. The tribunal hearing is set for September 2018. Although an estimate of the liability has been made, it has not been disclosed so as not to prejudice the case.

### 16.2 CONTINGENT LIABILITIES – UNQUANTIFIABLE

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There were no material unquantifiable contingent liabilities as at 31 March 2018.

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## 17. FINANCIAL INSTRUMENTS AND RISK

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STFC has very limited powers to borrow or invest surplus funds and, except for forward purchases of foreign currency, financial instruments are generated by day-to-day operational activities and are not held to change the risks facing STFC in undertaking its activities.

The carrying value of all financial instruments approximates to their fair value.

### LIQUIDITY RISK

STFC's net expenditure requirements are financed by resources voted annually by Parliament, and administered as grant-in-aid through BEIS. STFC is not therefore exposed to material liquidity risk.

### CREDIT RISK

Credit risk is the risk of financial loss if a customer or counterparty to a financial instrument fails to meet its contractual obligations. STFC is mainly exposed to credit risk from credit sales. The credit risk associated with trade receivables is not considered to be significant.

### FOREIGN CURRENCY RISK

Foreign currency risk arises when STFC enters into transactions denominated in a foreign currency. STFC pays in Euros and Swiss Francs for the UK's membership to the international collaborations of CERN, ESO, ESRF and ILL. To minimise the currency risk, STFC policy is to take out forward contracts arranged by the Bank of England to cover up to 90% of its annual international subscriptions due over the course of the current spending review period.

Execution of this policy is subject to BEIS approval. BEIS may consider other aspects beyond STFC's immediate financial considerations in evaluating the business case for hedging e.g. sector reform and related budgetary uncertainty, and potential to manage risks across the department.

## 18. RELATED-PARTY TRANSACTIONS

STFC is a Non-Departmental Public Body sponsored by BEIS. For the purpose of IAS 24, BEIS and its partner organisations are regarded as related parties. During the year, STFC had various material transactions with BEIS and with other entities for which BEIS is regarded as the parent department, including: Biotechnology and Biological Sciences Research Council, Engineering and Physical Sciences Research Council, Medical Research Council, Natural Environment Research Council, Innovate UK, UK Space Agency, United Kingdom Atomic Energy Authority and UK Shared Business Services Limited.

During the year, STFC made grants to and purchased goods and services from the following organisations where Council members held senior positions:

Organisation	Council Member	Number of grants	Value of grants	Value of goods and services
			£'000	£'000
Imperial College London	Professor Jordan Nash	38	8,500	629
University College London	Professor David Price FGS	68	6,765	516
University of Bath	Professor Carole Mundell	6	144	32
University of Cardiff	Professor Karen Holford	20	2,775	285
University of Edinburgh	Professor Richard Kenway	43	11,209	489
University of Sheffield	Professor Tony Ryan	35	2,367	452

None of the Council members above were involved in the authorisation of grants or contracts with their related organisations.

The STFC also provided researchers access to its scientific facilities, some of whom may be associated with the organisations listed in the table above.

Transactions between STFC and its joint ventures are disclosed in the following table:

Joint Venture	Type of transaction	Transaction amount		Balance	
		Expense / (income)		Debtor / (Creditor)	
		2017-18 £'000	2016-17 £'000	2017-18 £'000	2016-17 £'000
DLSL	Sale of goods and services	(1,620)	(1,847)	193	225
	Purchase of goods and services	1,082	93	(410)	(16)
	Operations funding	53,457	48,951	(1,840)	(1,164)
	Purchase of shares	14,655	22,239	(754)	(1,153)
Daresbury SIC LLP	Purchase of goods and services	555	38	-	(42)
HSIC (PubSP)	Capital injection	3,200	5,000	-	-
HSIC LP	Sale of goods and services	-	(8)	-	-
	Purchase of goods and services	1,083	744	(305)	(200)

No board or Council member has undertaken any material transactions with STFC during the year.

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## 19. THIRD-PARTY ASSETS

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STFC held £6,671k of third party assets at 31 March 2018 (31 March 2017: £7,517k). This is cash held relating to EU projects to be paid to third parties, where STFC acts as a co-ordinator on European Union framework agreements.

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## 20. EVENTS AFTER THE REPORTING PERIOD DATE

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In accordance with the requirements of IAS 10 Events after the Reporting Period, events after the date of the Statement of Financial Position 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 and Report of the Comptroller and Auditor General.

As set out in Note 1.1 'Going concern', under the Higher Education and Research Act 2017, UK Research and Innovation incorporated the assets, liabilities and functions of the seven Research Councils, Innovate UK and Government's funding of research in higher education from 1 April 2018.

There have been no material events between the Statement of Financial Position date and the date the accounts were authorised for issue requiring an adjustment to the financial statements.



Polaris House, North Star Avenue, Swindon SN2 1SZ, UK

T: +44(0)1793 442000 F: +44(0)1793 442002 E: [publications@stfc.ac.uk](mailto:publications@stfc.ac.uk)

<https://stfc.ukri.org>