



UK Research
and Innovation

Annual Report and Accounts 2020-21





**UK Research
and Innovation**

Annual Report and Accounts **2020-21**

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of Schedule 9 of the Higher Education and Research Act 2017.

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1. Introduction

Introduction by the Chair

As the incoming chair, I am delighted to introduce UK Research and Innovation's third Annual Report and Accounts.

2020-21 has been a remarkable year for UK Research and Innovation (UKRI). Over and above continuing to deliver on many other priorities, I am particularly impressed by the central role UKRI has played in supporting the UK's response to the COVID-19 pandemic.

I am hugely proud of the discovery research capability of this country and our excellent world-class universities and institutes. I am keen that we continue to nourish this and ensure that it remains strong, encouraging different disciplines to work together. I am also keen to make further inroads into what I think was one of the aims of UKRI when it was established: to become much better at pulling more of those great ideas through into very successful industrial endeavours that benefit the whole of the UK; create more jobs; create higher net wealth for the country; and allow us to deal with a lot of social issues as well as obviously making ourselves more competitive.

I would like to recognise the exceptional work of UKRI's 8,000 people for their unstinting work, often in difficult personal circumstances and working with remarkable effectiveness from home, through this very challenging year. I would also like to thank UKRI's senior team - and especially Ottoline Leyser, for her leadership and resilience in what has been an unusual and especially challenging first year as Chief Executive.

And I would like to thank the four departing members of UKRI Board - Sir Peter Bazalgette, Professor Max Lu, Vivienne Parry and Mustafa Suleyman. I am sorry I will not have the opportunity to work with them but would like to recognise their contribution to building and guiding UKRI through this challenging year.

Finally, I would like to thank the outgoing Chair of UKRI Board, Sir John Kingman for his outstanding leadership and commitment to the organisation, first as interim Chair whilst the organisation was created, and then as Chair from UKRI's legal inception in 2018.

Sir Andrew Mackenzie
Chair, UK Research and Innovation



Introduction by the CEO

Over the last year we have faced many challenges and have had to come to terms with big changes in the way we work and live as a result of the pandemic. I continue to be impressed by the way my colleagues within UKRI, and across the wider research and innovation system, have responded and adapted to these challenges. Our response to COVID-19 has been significant. We have supported the national and international effort to understand and mitigate the effects of the pandemic on our lives and on the economy, and to develop vaccines and treatments. We have worked to stabilise and support recovery across the research and innovation system, including the university sector. The value of a strong research and innovation system has been powerfully evident, highlighting UKRI's responsibility as the main public funder of research and innovation to support the health and vibrancy of this crucial national asset.

We initiated Rapid Response and Open COVID-19 Calls, funding research into the health, economic and social impacts of COVID-19, which demonstrated our ability to convene and catalyse in agile ways. Supporting research integrity and open research, we signed the commitment to share research findings and data relevant to COVID-19 rapidly and made this a condition of our COVID-19 investments. Working with the UK Department of Health and Social Care (DHSC), and the Wellcome Sanger Institute, we supported the COG-UK Consortium helping the efforts to track how the COVID-19 virus mutates. This massive sequencing effort has put the UK at the forefront of sequencing the virus, generating more than 250,000 sequences.

I am particularly proud of our staff response to the pandemic, adapting to homeworking swiftly and providing support to colleagues. Some of our staff are volunteering to deliver vaccines or have returned as front line workers. We have reprioritised our portfolios to support critical business activities whilst managing and mitigate the impact on the research and innovation community and we continued to deliver against our ongoing priorities through key programmes such as the Industrial Strategy Challenge Fund (ISCF), for example investing in the Commercialising Quantum Technologies and Industrial Decarbonisation challenges. We also actively supported 17,629 research and innovation awards this year (an 18% increase from last year). This includes awards through our business as usual programmes, investments as a result of our response to COVID-19 and extensions to awards, Studentships, and Fellowships due to COVID-19 impacts.

I am delighted that we continue to attract strong leadership to join the organisation, including – Christopher Smith, the new Executive Chair of Arts and Humanities Research Council and Indro Mukerjee, the new CEO of Innovate UK. Indro joins us at a pivotal time when innovation is being recognised as a key driver of the UK's post-pandemic growth strategy. We have also welcomed our new Chief Finance Officer, Siobhan Peters, and our new Chief Operating Officer, Tim Bianek, both of whom have exceptional public sector experience that will help to build further our operational strengths while implementing our strategic vision for UKRI.

As a learning organisation, we strive continuously to improve how we work by engaging with our stakeholders, evaluating what we do and adapting accordingly. Our ongoing work across our Reforming Our Business programme, which looks to improve our efficiency and effectiveness and remove unnecessary bureaucracy internally and in our funding activities, has begun to demonstrate the value we can deliver for ourselves and our communities. Working to streamline and harmonise how we fund, we piloted our new digital funding platform through the New Generation Thinkers programme and over the next year we will continue to build on this experience as part of our ongoing evolution as an organisation.



Dame Ottoline Leyser,
Chief Executive, UKRI

Over the last year, we have deeply appreciated the constructive engagement we have had with our stakeholders about the difficult decisions that we have faced. We have not always got our engagement and our communications right. We have learned a lot from the challenges of the past year, including reaffirming the high value of engagement and the importance of building partnerships and collaborations across the system, which we are committed to deepening and strengthening.

The effects of the pandemic will continue to challenge and impact how we work and our priorities, requiring flexibility as the pandemic progresses. We will continue to monitor and respond to COVID-19 impacts to support the research and innovation system. We also have been working to manage the implications and effects faced from the EU Exit transition, supporting our communities in partnership to develop plans to ensure that we are able to continue to deliver world class research and innovation with EU partners.

There are many opportunities ahead. We are developing our new strategy, which will enable us to look forward to how we can build our role as a steward of the research and innovation system, including fostering a positive research and innovation culture. We will continue to deliver government priorities and strategies, including the R&D roadmap, Innovation Strategy, Plan for Growth and the People and Culture Strategy. The government's 'Build Back Better: our plan for growth' has a commitment to the 2.4% R&D target, and we are looking forward to continuing to work together with the whole community to develop longer term plans for research and innovation in the UK.

We are also welcoming a new Chair of our Board Sir Andrew Mackenzie. He has an impressive background in both science and business and I am very much looking forward to working with him to realise our shared ambition for UKRI. I would like to express my deep appreciation and gratitude to Sir John Kingman for everything he has done before and during the formation of UKRI. He has played an instrumental role in the foundation of UKRI and has worked tirelessly to help us to grow as an organisation, providing invaluable wisdom and support. On behalf of the Board and all at UKRI, thank you.

About us

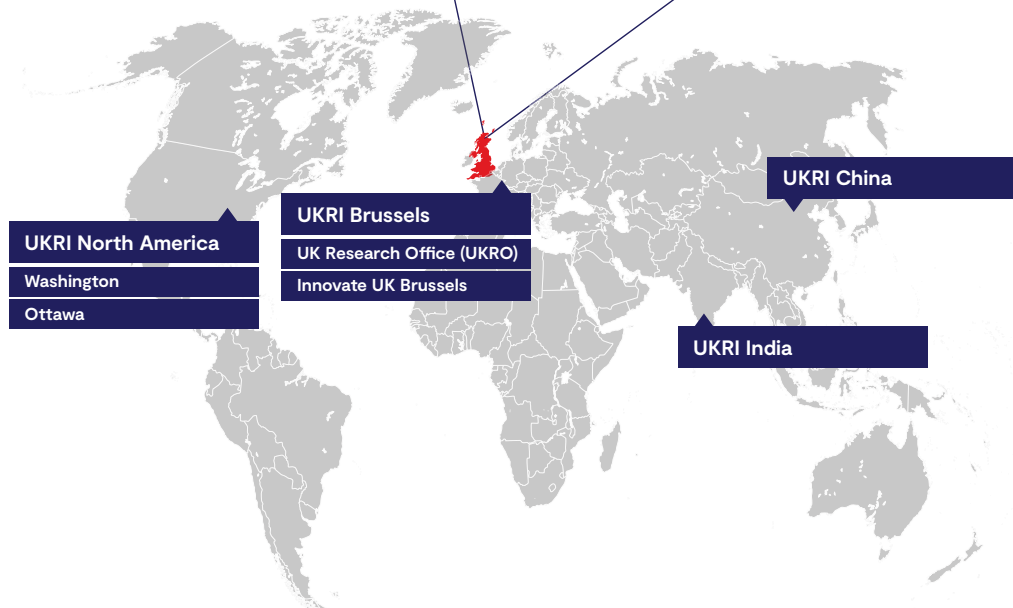
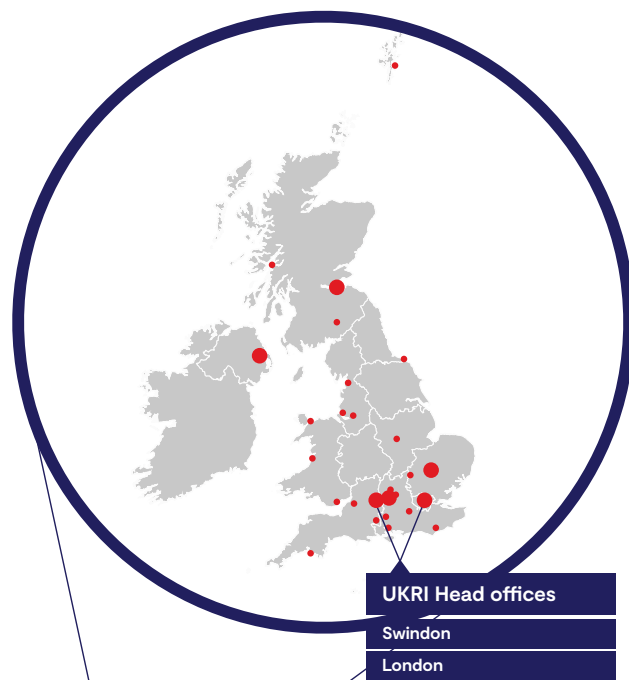
Launched in April 2018, UKRI is a non-departmental public body sponsored by the Department for Business, Energy and Industrial Strategy (BEIS). Our organisation brings together the seven disciplinary research councils, Research England, which is responsible for supporting research and knowledge exchange at higher education institutions in England, and the UK's innovation agency, Innovate UK.

In pursuing our vision and mission, we will continue to fund research and innovation, harnessing the depth and breadth of our councils' expertise and engagement and working with partners to facilitate the movement of people and ideas through the research and innovation system. Our structure enables us to maximise the value of what we deliver, harnessing expertise, supporting cross-disciplinary collaboration and building capability from a whole-system perspective.

As a steward of the research and innovation system, we work together both with our close partners at the heart of the system such as the Higher Education Institutions and institutes, other government departments such as the Department of Health and Social Care, innovative businesses, investors, not-for-profit organisations,

policy-makers, the devolved administrations, and with a wider set of partners such as those in the education system, civil society and internationally.

Working together, we will deliver the government's ambition for the UK to become a science and technology superpower, supporting and building a world-class research and innovation sector that is at the heart of the UK's economic and social fabric.



UKRI operates in multiple locations across the United Kingdom of Great Britain and Northern Ireland. Our UK Head offices are in **London** and **Swindon**, and in many places we operate across multiple locations in one geographic area (bigger dots on map). UKRI also operates globally, with main offices in **Europe**, **China**, **India** and **North America**. This map is representative but not exhaustive of all centres, units and facilities we fund and/or operate in.



Arts and Humanities Research Council

AHRC funds outstanding original research across the whole range of the arts and humanities. This research provides economic, social and cultural benefits to the UK, and contributes to the culture and welfare of societies around the globe.



Biotechnology and Biological Sciences Research Council

BBSRC invests in world-class bioscience research and training. This research is helping society to meet major challenges, including food security, green energy and healthier, longer lives and underpinning important UK economic sectors, such as farming, food, industrial biotechnology and pharmaceuticals.



Economic and Social Research Council

ESRC is the UK's largest funder of research on the social and economic questions facing us today. This research shapes public policy and contributes to making the economy more competitive, as well as giving people a better understanding of 21st century society.



Engineering and Physical Sciences Research Council

EPSRC invests in world-leading research and postgraduate training across the engineering and physical sciences. This research builds the knowledge and skills base needed to address scientific and technological challenges and provides a platform for future UK prosperity by contributing to a healthy, connected, resilient, productive nation.



Innovate UK

Innovate UK drives productivity and economic growth by supporting businesses to develop and realise the potential of new ideas, including those from the UK's world-class research base. They connect businesses to the partners, customers and investors that can help them turn these ideas into commercially successful products and services, and business growth.



Medical Research Council

MRC is at the forefront of scientific discovery to improve human health. Its scientists and clinical professionals tackle the greatest health problems facing humanity in the 21st century, from the rising tide of chronic diseases associated with ageing to developing new medicines to treat rare genetic disorders.



Natural Environment Research Council

NERC is the UK's leading investor in environmental science. Its world-class research, skills and infrastructure solve major global issues such as the climate crisis and plastic pollution, and bring benefits to the UK, such as affordable clean energy, sustainable agriculture, clean air, and resilience.



Research England

While Research England has responsibility for England-only universities in relation to research and knowledge exchange (KE) activities we are focused on creating and sustaining the conditions for a healthy and dynamic research and KE system in England. The system works to compliment similar systems across the Devolved Administrations, to ensure, as practicably as possible, system wide approaches are identified and implemented.



Science and Technology Facilities Council

STFC is a world-leading multi-disciplinary science organisation. Its research seeks to understand the Universe from the largest astronomical scales to the tiniest constituents of matter, and creates impact on a very tangible, human scale.

How we are governed

Our committees and senior leadership provide advice to our Board and the Department for Business, Energy and Industrial Strategy (BEIS) Secretary of State and are responsible for delivering an environment and culture for our staff that enables them to thrive and fulfil their potential. We seek to be a responsible organisation in the activities, research and innovation we fund, through the ways we catalyse, convene and conduct, and in how we inspire, lead and engage our staff, our partners and our communities. We aim to embed our core organisational values in everything we do, working with integrity to capture the power of collaboration and innovation to deliver excellence.

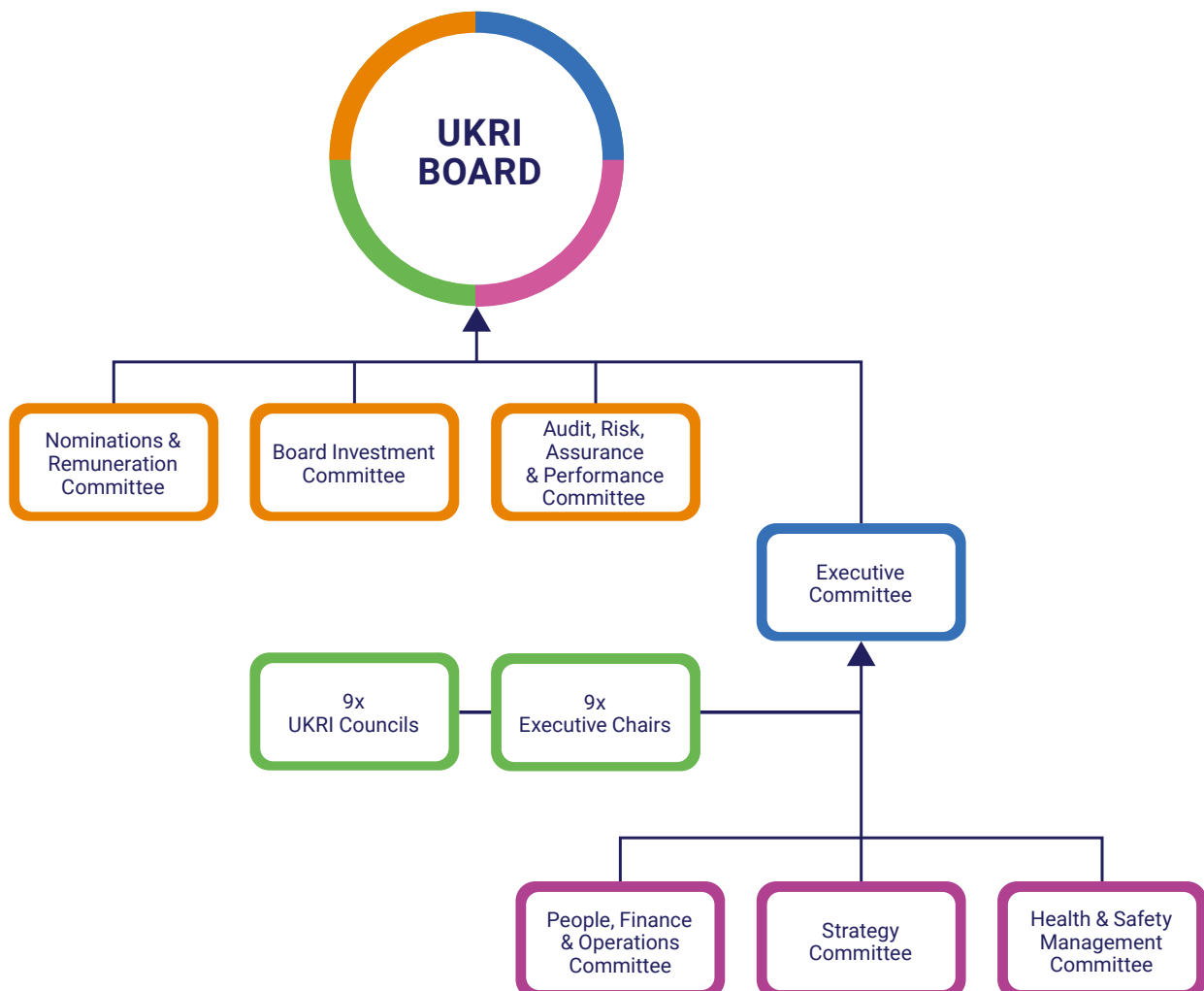
The UKRI Board is our primary governing body. It oversees and directs our activities, including our research and innovation strategy and is required to give updates and advice to the BEIS Secretary of State. It is supported by three committees: the Nominations and Remuneration Committee, Board Investment Committee, and the Audit Risk Assurance and Performance Committee.

How we are organised

Our Executive Committee provides strategic advice to the Board and is responsible for delivering the Board’s vision by overseeing the organisation’s overall performance and delivery. The Executive Committee is supported by the Strategy Committee; the People, Finance and Operations Committee; and the Health and Safety Management Committee.

Each of our nine councils is led by an Executive Chair advised by a Council comprising a majority of external members. Our nine councils work with their research and innovation communities and wider stakeholders to develop and implement delivery plans that contribute to our strategic objectives. Through their combined domain expertise, they collectively allow us to capture the synergies needed to steward a thriving research and innovation system.

Further details of our governing bodies can be found in our governance statement on page 102.



Our vision and mission

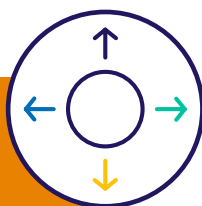
Our vision is for an outstanding research and innovation system in the UK that gives everyone the opportunity to contribute and to benefit, enriching lives locally, nationally and internationally.

Reflecting our stewardship role in the research and innovation system, **our mission** is to convene, catalyse, incentivise and invest in close collaboration with others to build a thriving, inclusive research and innovation system that connects discovery to prosperity and public good.

Our Annual Report and Accounts sets out our progress against our vision, mission, priorities and commitments for the financial year 2020-21, including how we have invested in key activities, evidence of our impact in the research and innovation landscape and how we are working with our partners across the research and innovation system to tackle local, national and global challenges.

We work with partners to shape a dynamic, diverse and inclusive system of research and innovation in the UK that is an integral part of society, giving everyone the opportunity to participate and to benefit. Our partners work with us to inform our decision-making, from advisory groups through to peer review and review panels and co-funding initiatives. UKRI, as the UK's largest public funder of research and innovation, has a central role to play in supporting and stewarding to ensure the health of the system as a whole, now and in the future.

We will **convene and catalyse**, by listening to and connecting diverse communities to create new combinations, working in partnership with others. And we will help to make things happen, catalysing new activities through our work and investment.



We will **incentivise** the development of a research and innovation system that realises our vision through all the choices we make, how we behave, and in our policies and activities.



We will **invest** in people, ideas and infrastructure, through a portfolio of investments that ensures public benefit from the system as a whole, informed by engagement and evidence. We will fund efficiently and effectively.



We will **conduct** high-quality research and innovation and provide critical national capabilities through our centres, units and institutes.



Impact highlights 2020-21

In 2021

*Awards include Research and Innovation awards and Fellowships

We committed to fund
8,049
awards*

Maintained an award rate of **21%** 

In 2020-21, we actively supported

3,872
organisations

of which
3,449
are Businesses supported

including
3,167
Small and Medium-sized enterprises

17,629
Research and Innovation awards

supporting
58,280
Individuals

and
1,815
Fellowships

The numbers actively supported are higher than last year as a result of Award, Studentship, and Fellowship extensions, and new awards offered in 2020-21, in response to COVID-19.

Image credit – Getty Images



Funding Outputs

Awards started
between 2016
and 2020

We provided funding for

21,081

awards that translated into an output

Our funding supported publications
that were cited

2.6

times more than the world average of 1.0
and the UK average of 1.56

Our researchers go on
to receive funding from

81

countries to further
their research



Image credit – Getty Images



2. Performance Report

The overview section provides a summary for the annual report and accounts. It includes a summary of our performance, our finances, our response to challenges over the year, including COVID-19 and EU Exit, and how we manage key risks.

Performance Overview

In 2020-21 we published our Corporate Plan, reflecting our objectives for the year. Since then, we have worked to deliver the commitments it set out, continuing to deliver on our vision and mission, and on government priorities and strategies. We have continued to deliver through our cross-cutting funds, addressing key challenges including net zero, and have continued to work with partners across the UK to identify and harness opportunities for research and innovation-led growth, aiming to support the creation of high-value jobs and boost productivity supporting economic growth and levelling up.

We have remained responsive to COVID-19 impacts and priorities, delivering critical support and funding. We have worked to support strong foundations for the research and innovation system, by promoting research integrity and openness and working to support the sustainability of the research and innovation system. We continue to work towards greater efficiencies and to improve how we work, including through our dedicated Reforming our Business Programme. We continue to develop our new Performance Management Framework, using a Balanced Scorecard approach, which will enhance our ability to monitor our performance and evaluate how we deliver against our objectives.

We systematically monitor the outputs and outcomes of all our research and innovation awards using established processes, enabling us to evidence what our funding has delivered. These tables are included throughout the performance section, reflecting output by year in which awards started. The data are not meant to be exhaustive of all outcomes realised by our grant funding in any single year, as outcomes data is reported over time and impacts are monitored over years. This year, the number of our funding inputs, applications, awards and people we support are higher than in previous years due to our response to COVID-19. We have seen a significant increase in applications in response to our additional COVID-19 funding calls and to mitigate some of the impacts of COVID-19 on existing awards, we have extended the life of some grants. This means that our 2020-21 data reflects more active grants in our system, resulting in an increase of numbers around who we actively support, including students and fellows supported by UKRI during the year.

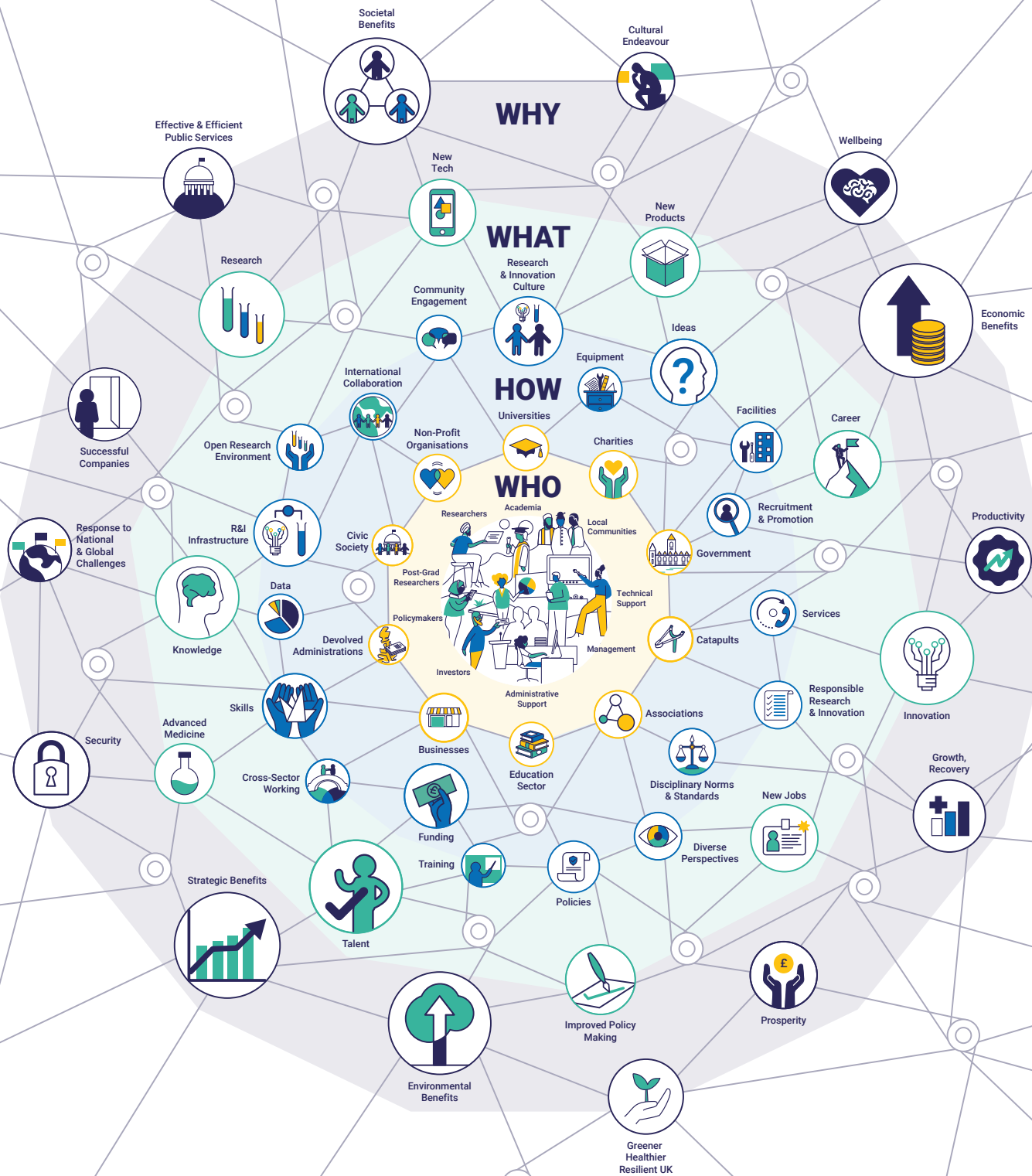
Many of our projects, programmes and initiatives also contribute to the United Nations Sustainable Development Goals, with some highlights included in the analysis section and throughout the Sustainability Report.

Some key activities that we have been working on this year and will continue to deliver next year include our support for the UN Climate Change Conference (COP26), where we are promoting activities and events to celebrate the vital contribution which researchers and innovators are making towards climate action, and supporting the Research Excellence Framework (REF) 2021 assessment, with outcomes expected to be announced in April 2022. Informing our priorities over the coming year, our current Corporate Plan for 2020-21 will remain in place, with the aim to publish a new Corporate Plan for 2022-23 as well as developing our UKRI-wide strategy.

What we set out to achieve:

- supporting excellent research and cutting-edge innovation across all parts of the research and innovation sector, delivering impactful outcomes that improve lives and increase prosperity
- working to support economic growth, ensuring we maximise the impacts of research and innovation
- providing critical support to mitigate the impacts of COVID-19 on the research and innovation sector, supporting system stability, sustainability and recovery
- supporting EU Exit transition planning
- continuing to deliver on major challenges facing society, including net zero, sustainability and decarbonisation and health, ageing and wellbeing.

We work with our partners across the research and innovation landscape to shape a dynamic, diverse and inclusive system. By working together, we harness expertise, collaborate and build capability to maximise the impacts of research and innovation.



Our Funding Highlights

We fund Research and Innovation across all regions of the UK

In 2020-21 we ran

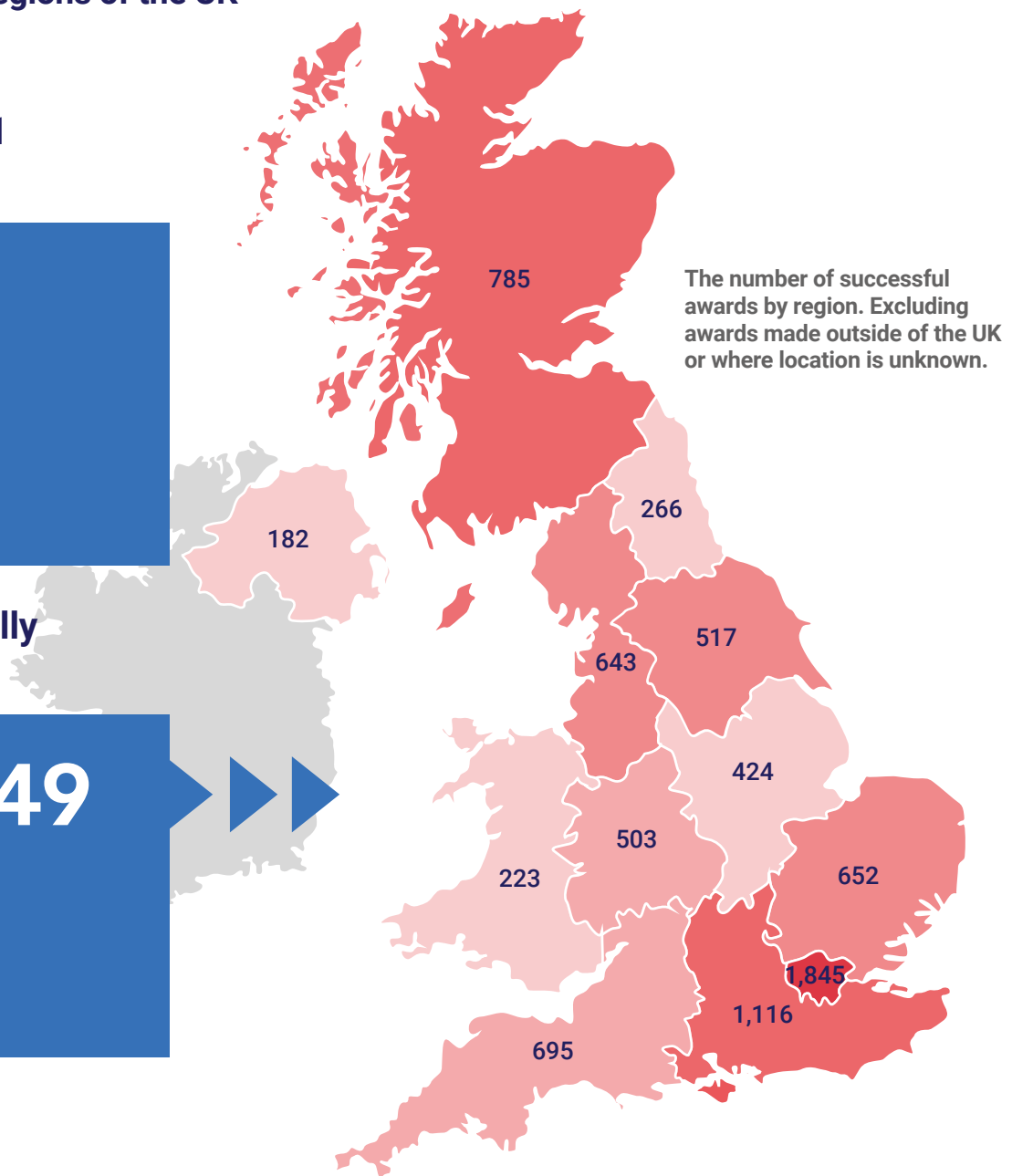
461

Calls

Successfully awarded

8,049

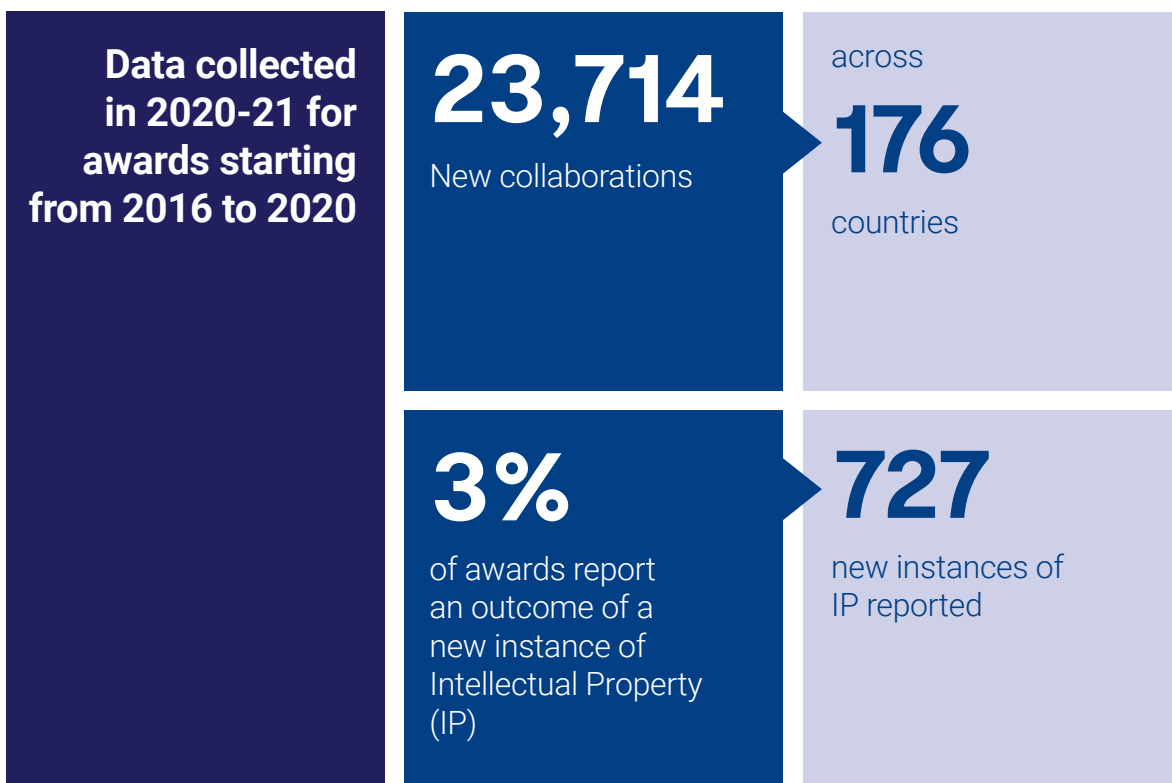
Awards



We collect diversity data related to our funding for information see: <https://www.ukri.org/our-work/supporting-healthy-research-and-innovation-culture/equality-diversity-and-inclusion/diversity-data/>

Our Performance Metrics for 2020-21 are published here: <https://www.ukri.org/about-us/policies-standards-and-data/data-collection/>

Since UKRI was established in 2018, we have supported more than **52,800 awards** with a combined value of more than **£22 billion¹**



152,141

Number of unique publications

18,943

Instances of further funding

973

Spinouts

1. This includes Research and Innovation awards, Fellowships and Studentships.

Financial Overview

UKRI's expenditure is reported on two different bases in this Annual Report and Accounts:

1. The Consolidated Statement of Comprehensive Net Expenditure (page 142) presents net expenditure of £8.8 billion for the UKRI Group. The expenditure is calculated following accounting standards and guidance which are explained in more detail in Note 1 to the financial statements and on a similar basis to those rules applied by organisations internationally.
2. The Outturn against Budget is £9.2 billion. These figures are calculated in accordance with HM Treasury's budgeting framework. The figures used in this Annual Report have been prepared on this basis. There is a difference between these two bases primarily due to net additions to Property, Plant and Equipment of £323 million that are capitalised, rather than being in the Statement of Comprehensive Net Expenditure, but which have a budgetary impact.

Outturn against budget 2020-21

| UKRI 2020-21 Budget Allocation | Full year Outturn £m | Full Year Budget £m | Variance to Outturn £m | UKRI Variance to outturn % |
|--|-------------------------|------------------------|---------------------------|-------------------------------|
| R & D | 4,911.7 | 4,902.7 | (9.0) | -0.2% |
| Infrastructure | 1,246.6 | 1,234.5 | (12.1) | -1.0% |
| NPIF | 1,360.2 | 1,369.2 | 9.0 | 0.7% |
| Non Ringfenced | 537.3 | 572.2 | 34.9 | 6.1% |
| HE Teaching Grant Contribution | 57.6 | 57.1 | (0.5) | -0.9% |
| Corporate Funding (ESA10 Administration) | 117.8 | 109.8 | (8.0) | -7.3% |
| Core Allocation | 8,231.2 | 8,245.5 | 14.3 | 0.2% |
| GCRF | 336.6 | 367.2 | 30.6 | 8.3% |
| Newton Fund | 51.0 | 55.7 | 4.7 | 8.4% |
| BEIS Managed Programmes | 294.9 | 309.5 | 14.6 | 4.7% |
| Ringfenced Allocation | 682.5 | 732.4 | 49.9 | 6.8% |
| Grand Total Capital Allocation | 8,913.7 | 8,977.9 | 64.2 | 0.7% |
| Innovation Loans | 37.7 | 55.4 | 17.7 | 32.0% |
| Other Financial Transactions | (3.0) | (14.3) | (11.3) | -79.0% |
| Ring-fenced Resource Budget | 192.6 | 220.7 | 28.1 | 12.7% |
| Annually Managed Expenditure | 23.6 | 106.4 | 82.8 | 77.8% |
| Total Allocation | 9,164.6 | 9,346.1 | 181.5 | 1.9% |

The table above provides a summary of UKRI's outturn against budget. UKRI has a financial management target to deliver an outturn that is within 1% of its capital allocation. As the table above demonstrates, this target was achieved.

Early in the financial year, UKRI evaluated the impact of the pandemic on its original delivery and financial plans and identified funding that could be made available to support the research and innovation system through this period of significant disruption, as well as providing funding for specific research into COVID-19. In line with reporting requirements, please see the COVID-19 and EU Exit sections that follow for a specific overview of our financial performance in these areas.

In line with reporting requirements, the table below sets out outturn since 2018-2019.

Outturn since 2018-19

| UKRI Allocation Headings | Full year Outturn 2020-21 £m | Full year Outturn 2019-20 £m | Full year Outturn 2018-19 £m |
|--|------------------------------------|------------------------------------|------------------------------------|
| R & D | 4,911.7 | 4,381.4 | 4,368.2 |
| Infrastructure | 1,246.6 | 912.6 | 1,040.4 |
| NPIF | 1,360.2 | 1,106.9 | 607.9 |
| Non Ringfenced | 537.3 | 487.8 | 563.5 |
| HE Teaching Grant Contribution | 57.6 | 57.7 | 57.7 |
| Corporate Funding (ESA10 Administration) | 117.8 | 102.5 | 111.1 |
| Core Allocation | 8,231.2 | 7,048.9 | 6,748.8 |
| GCRF | 336.6 | 280.2 | 224.4 |
| Newton Fund | 51.0 | 67.3 | 77.5 |
| BEIS Managed Programmes | 294.9 | 268.2 | 268.7 |
| Tax (Asset Transfer Liability) | - | - | 143.3 |
| Ringfenced Allocation | 682.5 | 615.7 | 713.9 |
| Grand Total Capital Allocation | 8,913.7 | 7,664.6 | 7,462.7 |
| Innovation Loans | 37.7 | 23.7 | 15.8 |
| Other Financial Transactions | (3.0) | (17.5) | (18.0) |
| Ring-fenced Resource Budget | 192.6 | 190.0 | 233.2 |
| Annually Managed Expenditure | 23.6 | 87.9 | (36.9) |
| Total Allocation | 9,164.6 | 7,948.7 | 7,656.8 |

The R&D outturn grew by £530 million in 2020-21 due to the additional spend on COVID-19 interventions as well as reprofiling of QR payments to Higher Education Institutions (as set out in note 5.3) to manage the overall UKRI Core Capital position. The science infrastructure expenditure dipped between 2018-19 and 2019-20 largely due to a reduction in expenditure against Research England's **Research and Partnership Investment Fund programme**. The ringfence then grew in 2020-21 due to an increase in **World Class Labs** expenditure of £293 million.

The National Productivity Investment Fund (NPIF) has grown year on year due to the introduction and growth of new programmes including the **Industrial Strategy Challenge Fund (ISCF)** where wave 3 was introduced in 2019-20.

UKRI has been expected to reduce its admin envelope during this period. However, the increase in 2020-21 is due to the direct recognition of the £24.5m UKSBS service charge in UKRI's budgets for the first time rather than it being recognised as a notional service charge. BEIS Managed Programmes increased in 2020-21 due to the COVID-19 package awarded to Innovate UK specifically in relation to the **Vaccines Task Force**. Innovate UK loans expenditure increased in 2020-21 due to the introduction of Innovation Continuity Loans.

Full detail on changes in UKRI's Consolidated Statement of Financial Position in 2020-21 is contained in the Financial Statements and notes at pages 147-183. Explanations for year-on-year variances in balances can be found in the notes to the financial statements.

UKRI Councils' Investment 2020-21

This chart sets out UKRI's budget outturn excluding administrative spend across the Corporate Hub and Councils, Corporation Tax, depreciation and amortisation costs and Annually Managed Expenditure.



- **Infrastructure**
Capital investment in research and innovation infrastructure within UKRI and research organisations, including equipment, facilities and technology
- **Innovate UK programmes**
Supporting businesses to improve productivity and growth by realising the potential of new technologies and developing new commercial ideas
- **ODA**
Research and development activities within the scope of Official Development Assistance as defined by the Organisation for Economic Co-operation and Development, including the Global Challenges Research Fund and Newton Fund

- **National Productivity Investment Fund**
Programmes within scope of the cross-Government National Productivity Investment Fund, established to increase capital spending for areas critical for improving UK productivity, including the Industrial Strategy Challenge Fund, Strategic Priorities Fund
- **R & D**
Funding for research and innovation awards, research facility running costs, fostering international collaboration, supporting postgraduate training, public engagement, knowledge transfer, and other core research activities

Over the last year, we have remained responsive to changes and impacts across the research and innovation landscape, working in partnership to deliver critical support and funding to address key challenges.

Our COVID-19 Response Across the Research and Innovation System:

Our response to COVID-19 has included supporting the stability and sustainability of the research and innovation system and funding critical activities to support the national response. The success and speed of delivery of the projects we have supported is in many cases enabled by decade-long investments in research and innovation. Building on our ongoing work across the sector, we have provided critical support through new and existing funding mechanisms to manage and mitigate the impacts of the pandemic. We are engaged in an evaluation of UKRI's response to inform and improve how we respond to any future events which, like COVID-19, demand a coordinated and agile response.

Our activities:

Funding research and innovation to support the national response:

- funding key research and building a broader understanding of COVID-19, the **UKRI and Department of Health and Social Care Rapid Response Calls** provided c.£71 million in co-funded investment and supported a total of 78 projects. Through the UKRI **COVID-19 Agile Call** we committed £140 million to more than 400 grants awarded across UKRI's portfolio
- in May 2020, we announced that over 800 companies across the UK which applied to the Innovate UK call for, **business-led intervention in response to global disruption due to the pandemic**, would share grant funding of £40 million, **double** the amount that was first planned for this competition. The call received more than 8,600 applications, with teams involved processing more applications in two weeks than in the entire previous financial year
- we launched programmes using **Official Development Assistance (ODA)** to mitigate the impacts of COVID-19 on Low and Middle Income Countries (LMICs), including our **Global Challenges Research Fund/Newton Agile call** and working in partnership to support the **COVID-19 Africa Rapid Grant Fund** and the **Global Effort on COVID-19 Health Research**
- through the **Fund for International Collaboration Strategic Opportunities stream**, we supported a new UK-India COVID-19 partnership, focused on understanding the severity of COVID-19 in South Asian populations in India and the UK.

Working to support the stability and sustainability of the research and innovation sectors, we:

- announced, as part of a £1.25 billion government package, **£750 million of targeted support for R&D intensive firms, including bringing forward £200 million of existing funding**, covering around 500 project extensions and £550 million of new funding for continuity grants and loans and business advisory services. £314 million is currently committed in grants and loans, with a further £217 million of loans still to be assessed
- delivered the UKRI **COVID-19 Grant Extension Allocation** of approximately £180 million to support costed grant extensions across the university sector, £90 million of which has been paid in 2020-21 with 147 allocations made
- have committed over £62 million to support extensions for Doctoral students whose research has been impacted by COVID-19 since April 2020. As part of our COVID-19 **Doctoral Extension Funding programme**, UKRI has spent £24.8 million in 2020-2021 with further payments scheduled in 2021-2022 and 2022-2023. In March 2021 we also provided additional flexibility to training grant holders to use their existing funding to support extensions
- allocated £11 million of **Quality Related Research Degree Programme Supervision** block-funding via Research England to English universities to support the work those organisations are undertaking to help their wider postgraduate research communities
- through Research England, made £100 million immediately available to the university sector to help protect research and innovation by bringing forward Quality-Related allocations from 2021-22 into 2020-21
- through Research England, allocated a total of **£10 million to three leading specialist research institutions** to address a reduction in charity funding caused by the pandemic. This funding was reallocated from the £80 million Specialist Institution Fund launched by the Chancellor in the 2020 spring budget
- developed and delivered the **UKRI COVID-19 Institute Support Fund**, which provided £13.6 million of funding to support short-term stability for UKRI's strategically funded and strategically important institutes
- provided financial support to maintain critical research expertise, supporting the development and delivery of a support package for the university sector – the **Sustaining University Research Expertise (SURE) Fund** – in collaboration with government and devolved administrations. £21.7 million was made available to participating universities, through a mixture of grants amounting to c.£300,000 provided by UKRI, and £21.4 million in loans provided by the Department for Business, Energy and Industrial Strategy (BEIS)
- increased **flexibility through funding policy changes**, by delaying the closing dates of responsive-mode funding calls and by extending the permissible start dates of grants and fellowships by 3 to 6 months. **No-cost extensions were also made available** to existing research and innovation grant holders
- to support COVID-19 research, we implemented a concession for researchers working on the **Global Talent Visa**, helping international researchers working on COVID-19 related projects benefit from a fast-tracked visa with relaxed eligibility criteria.

Over the year, we have delivered a range of support to the research and innovation system in response to COVID-19, however the full impact of the pandemic will take time to understand and will continue to evolve. We are continuing to gather evidence on how the pandemic has affected researchers, innovators and their outputs, identifying impacts ranging from the closure of key facilities, restrictions on travel and increased caring responsibilities. To support our continued response, we are working to evaluate the effectiveness of the interventions and policies we introduced to support the system during the pandemic and to understand how we can continue to best support it in the coming years.

Financial Review: Statement of Financial impact in relation to COVID-19

UKRI supported a number of COVID-19 interventions during the year, some of which had additional funding provided while others were funded through existing UKRI budgets. At the start of 2020-21, UKRI assessed the financial impacts of COVID-19 on existing programmes and identified a likely worth of £361 million.

HM Treasury provided additional funding of £397 million to fund a business support package. All other COVID-19 initiatives were funded from existing UKRI budgets.

The table below outlines expenditure on the COVID-19 initiatives funded by UKRI throughout 2020-21.

| UKRI COVID-19 Interventions | Council | 2020-21 Outturn-£m |
|--|-------------|--------------------|
| IUK Initiatives Inc. Vaccine Taskforce, VMIC and Innovative Support Business Package | IUK | 407.3 |
| COVID-19 Grant Extension Allocation | Across UKRI | 89.7 |
| UKRI - Agile Call - Responsive and Strategic Proposals | Across UKRI | 64.6 |
| MRC Initiatives including National Core Studies | MRC | 51.7 |
| PhD extensions | Across UKRI | 24.8 |
| Small and Specialist Institutions and Block funding via Research England | RE | 21.0 |
| UKRI COVID-19 Institute Support Fund | Across UKRI | 13.6 |
| Other Cross UKRI Initiatives Inc. Coronavirus Explained Website, SURE Package | Across UKRI | 0.6 |
| Total | | 673.3 |

Our activities in response to COVID-19 are multi-year in nature with continuing financial impacts in 2021-22. UKRI expects to allocate £393 million to COVID-19 initiatives in 2021-22.

UKRI deployed all additional funding provided for COVID-19 initiatives in 2020-21.

COVID-19 Staff Redeployment:

Across UKRI many employees have been supporting activities arising as a result of the pandemic, particularly within the Medical Research Council (MRC). Funded by the Department of Health and Social Care (DHSC), many others have taken on additional duties to manage recovery, support IT provision for home working, support wellbeing and health of employees and ensure the estate is fit for purpose or reoccupation. This includes 2.5 FTE seconded to the Turing Institute which is funded by DHSC. These employees have contributed to COVID-19 responses as part of their role, but have not changed job title, funding source or stopped performing their substantive function, taking on additional responsibilities and managed priorities within their current role.

The employees highlighted in the table below are a specific redeployment within the MRC Head Office to coordinate MRC engagement. 6.5 FTE were redeployed into the area over the course of the year, and this has since reduced to 4.5 FTE following the conclusion of two short-term redeployments. Redeployment in this context applies where the employee has changed their job or role to specifically and exclusively work on COVID-19 related matters.

COVID-19 Staff Redeployment Table

| Redeployments to support COVID-19 work | CS grade equivalent | | | | Grand Total |
|--|---------------------|-----|---------|-------|-------------|
| | AA/AO | EO | HEO/SEO | G6/G7 | |
| 2019-20 | - | - | - | - | - |
| 2020-21 | 1.0 | 1.0 | 2.5 | 2.0 | 6.5 |

Within COVID-19 programmes, UKRI incurred directly attributable staff costs of £9.3 million in 2020-21.

Image credit – Getty Images



Clinical

COVID-19 Support Highlights

Below are some examples of the ways in which we have worked to support the national and international response to COVID-19.

The **Oxford/AstraZeneca COVID-19 vaccine**, developed by the University of Oxford and AstraZeneca, is based on decades of in-depth research supported by UKRI. UKRI funded phase one of the project, building on the **UK Vaccine Network** with an existing UKRI grant and leveraging existing investments in vaccine manufacturing including the Vaccines Manufacturing Innovation Centre to accelerate delivery. The supply chain is now being established to deliver two billion doses.

With the National Institute of Health Research (NIHR), UKRI founded the **RECOVERY trial**, the world's largest clinical trial into treatments for COVID-19, with more than 30,000 participants across 177 trial sites in the UK. The trial found dexamethasone, one of the world's first treatments for COVID-19, which has saved the lives of around 650,000 people globally so far, with 12,000 of these in the UK.



The UKRI-funded ISARIC platform is currently the largest study of COVID-19 in the world. With open access samples of 2,598 hospitalised patients and data on 86,000 patients overall, it is producing risk prediction models for the UK population.

The Biotechnology and Biological Sciences Research Council (BBSRC) funded research through the Midlands Integrative Biosciences Training Partnership, has resulted in the development of a COVID-19 test that reduces testing time from 30 minutes to under 5 minutes, and delivers accurate results.

The method was developed to reduce time and increase throughput in COVID-19 testing. The technique also has the potential to be applied to any RNA-based infectious agent or disease biomarker including cancer.

Data

COVID-19 has illustrated the importance of ongoing data infrastructure investments and the long-term perspectives they provide. Our funding has provided support for longitudinal studies such as the **CLOSER (Cohort and Longitudinal Studies Enhancement Resources) COVID-19 research hub** which has surveyed over 100,000 participants on the effects of the various restrictions on health, social, economic and behavioural change.

UKRI and NIHR are funding six projects totalling almost £3 million to explain and mitigate the disproportionate death rate from COVID-19 among people from **Black Asian and other Minority Ethnic (BAME)** backgrounds. Researchers will collaborate with existing UKRI investments including **UK Biobank** and the **MRC Lifecourse Epidemiology Unit**.



International collaborations

UKRI has partnered with leading international organisations, including in the US and South Korea, to provide supercomputing capabilities and support global efforts to tackle the ongoing COVID-19 pandemic.

This includes providing access to **ARCHER** (Advanced Research Computing High-End Resource) and **DIRAC** (Distributed Research using Advanced Computing), which are producing key calculations on projects ranging from bioinformatics to epidemiological and molecular modelling research

Coronavirus Toolkit

Medical Research Council (MRC) Scientists, as part of an international consortium, have devised a toolkit that allows researchers open access to materials such as antibodies and genetic tools, to further COVID-19 research. This will assist with characterising new variants of the virus, monitoring vaccine efficacy, and helping to aid preparedness for future coronavirus pandemics.



UKRI has been playing an active role in supporting the **coordinated global research and innovation effort required to tackle COVID-19**, building upon our strong bilateral partnerships and the leading role we play in multilateral science forums. For example, we led on the development of a Global Research Council (GRC) statement calling on the global research community to collaborate in the fight against the virus and encourage sharing research findings and data.



Societal impacts

The 'Joint **UNI**versities **P**andemic and **E**pidemiological **R**esearch' (JUNIPER) consortium has brought together leading mathematical and statistical modellers from seven UK universities. Their efforts have informed policymakers of how new variants are spreading across the UK, the effect of vaccination rates, and how to ease lockdown restrictions safely.

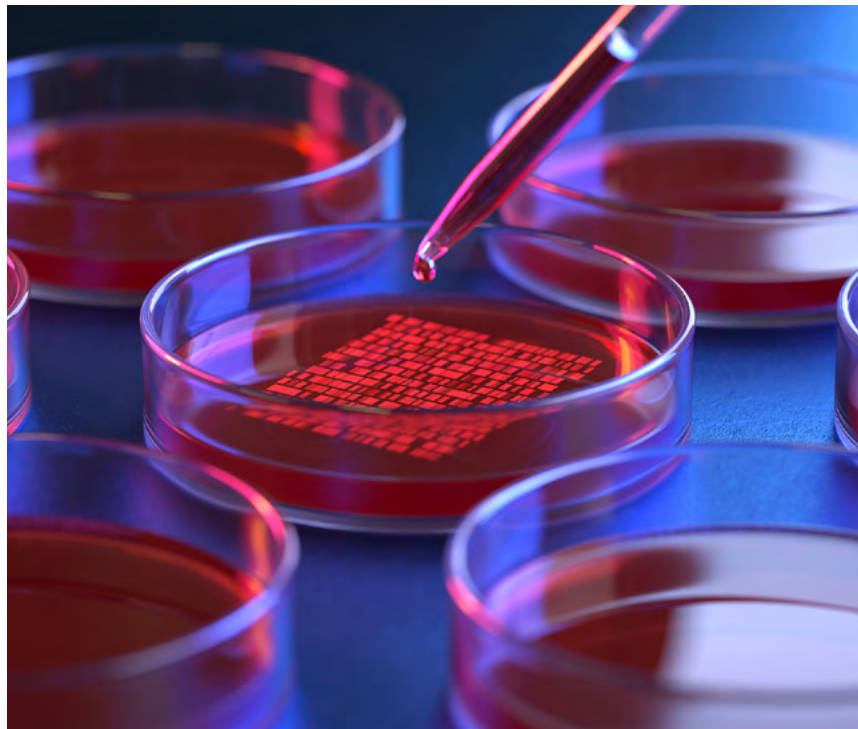
The Arts and Humanities Research Council (AHRC)-funded '**Culture Boxes**' project is testing how music and art can boost wellbeing in people with dementia while restrictions are ongoing. The boxes are being sent to 40 care homes across the UK, focusing on areas of socioeconomic deprivation and underserved communities, helping us better understand the impact of restrictions on the community and addressing serious issues of isolation and loneliness.



Genome sequencing

The **COG-UK Consortium**, supported by £20 million funding from UKRI, the UK Department of Health and Social Care (DHSC), and the Wellcome Sanger Institute, is tracking how the COVID-19 virus mutates. This massive sequencing effort has put the UK at the forefront of sequencing the virus, generating more than 250,000 sequences.

The **MRC Centre for Global Infectious Disease Analysis** at Imperial College London has been at the forefront of delivering timely analysis to inform policy responses to infectious disease threats both in the UK and for the WHO. The **MRC Centre for Virus Research** at the University of Glasgow, working in collaboration with NHS Greater Glasgow, completed the genomic sequencing and analysis of Scotland's first confirmed COVID-19 case within 48 hours of diagnosis.



Our Organisational Response to COVID-19:

Our first priority has remained the health, wellbeing and safety of all our staff. In response to lockdown measures, from March 2020 staff moved to remote working wherever possible. We have remained responsive to business continuity priorities and planning and provided support that enabled staff to adjust safely and quickly to working from home.

Staff and Wellbeing:

While we have seen a gradual reduction in sickness absence over the year, we did see a higher rate of illness linked to the physical and psychological effects of the pandemic, which we continue to monitor closely. Targeted wellbeing interventions have had a positive impact across UKRI, and we have worked to ensure policies and guidance have been flexible to support both performance and wellbeing. Interventions included:

- improvements to **Flexible Working Guidance**, including provision of special paid leave, to ensure that staff with caring and/or childcare responsibilities can work flexibly
- **online health and safety guidance** and additional IT and 'office' equipment
- regular communication and dialogue with senior leaders via a regular **organisation-wide webinar** led by the Chief Executive
- **COVID-19-specific staff surveys** to better understand how staff were feeling and how we might support them more effectively
- specific wellbeing initiatives, including our '**Action for Happiness**' webinars complementing and enhancing our existing **Employee Assistance Programme**; Toolkits and online courses for managers to help them lead and support staff working remotely.

Estates and Offices:

Much of our office space and headquarters has remained closed, while some of our lab space has remained open, particularly sites working on our response to COVID-19. We have:

- ensured essential support services continued to run, including postal and delivery services, enabling delivery of equipment to support remote working
- funded alterations in our institutes and centres to ensure work environments were COVID-19-compliant, and managed the maintenance of and access to sites, supporting staff with wellbeing needs to safely return to site. This work will also support a wider return to site when this is possible.

UKRI Operations:

In response to changing demands, we re-prioritised ongoing activities in response to COVID-19 resourcing impacts, with senior leadership assessing plans and priorities to reduce pressure on teams during lockdown periods.

In support of our Research Councils, our grant funding service has maintained operations at normal service levels with incredible efforts. While we have maintained relatively stable funding opportunities throughout the year, we have seen a marked rise in grant queries and applications, particularly relating to research opportunities supporting the national pandemic. Between April and June 2020, we received 2,000 more enquiries and an additional 2,053 new grant applications compared to the same period in 2019 due to our COVID-19 rapid response calls. This increase is against an active portfolio at the time of approximately 14,000 research and training grants.

Funding services through Innovate UK and Research England have also seen an increase in applications as a result of our response to the pandemic. The COVID-19 Rapid Response initiative had 20,822 applications, which has more than doubled the total number of applications UKRI would receive in a year.

Table 1: Research and Innovation Applications and Fellowships Applications from 2018-19 to 2020-21

| | 2018-19 | 2019-20 | 2020-21 (Including COVID-19 Applications) | 2020-21 (Excluding COVID-19 Applications) |
|--------------------------------------|---------|---------|--|--|
| Total applications received (number) | 19,131 | 20,890 | 46,462 | 25,640 |
| Applied for value (£m) | 12,492 | 12,336 | 17,544 | 14,198 |

- Total applications to Research Councils, Innovate UK and Research England.

EU Exit

A key priority for UKRI and our communities has been to ensure we have clarity around any changes to programmes as a result of the decision to leave the European Union. Agreed at the end of 2020, the UK's Trade and Co-operation Agreement with the European Union included provisions for UK researchers and innovators to continue to participate fully in Horizon Europe, with the UK joining the programme as an Associated Country.

As a result of this decision, we did not need to implement the mitigation plans we had prepared over the year. To ensure we were prepared for any outcome, we worked closely with BEIS to prepare for scenarios where the UK either did not associate to Horizon Europe, or where there was a delay to association.

Key activities included:

- in the case of a delay to association or non-association, we developed plans to scale up prestigious UKRI schemes to allow UK researchers and innovators to continue to have access to opportunities and to allow our institutions to attract and retain international talent. We also developed policies and plans, and prepared processes and systems to enable the funding of UK partners successful in bidding to programmes open to third country participation from the start of Horizon Europe in 2021
- in the case of non-association, we worked to develop plans for a new UK Discovery Fund. This was co-developed and co-delivered in partnership with the National Academies, BEIS and the Devolved Administrations. This aimed to develop a prestigious, curiosity-driven scheme to support excellent research and talented individuals at all career stages
- during this time, the UK Research Office (UKRO) in Brussels continued to support the UK research and innovation community's engagement in EU programmes, enabling continued engagement in wider policy dialogues and Horizon Europe developments.

Financial Review: Statement of Financial Impact and Staff Redeployment to Support EU Exit

To support the delivery of this EU Exit work, staff were deployed from across the organisation; staff were either seconded from the various Councils and Innovate UK or assigned from the International Directorate (part of the UKRI Corporate Hub), with a minimum number of contractors employed. Following the decision to associate on 24 December 2020, the programme was closed. By 31 March 2021 all staff had either been released back to their original Council or found alternative roles within UKRI. Redeployment in this context applies where the employee has changed their job or role to specifically and exclusively work on EU Exit related matters.

UKRI recruited a number of temporary agency staff to support additional activity arising from the UK's exit from the European Union, generating staff costs during the year. These temporary agency staff were exited prior to 31st March 2020 when UKRI no longer required them to support this activity. Although a proportion of the initial requirement was met through external hires, 79.5 existing Full Time Employees were redeployed into EU Exit work from other UKRI areas in 2019-20, with this reduced to 6.6 Full Time Employees in 2020-21.

Expenditure in the year on EU exit work is summarised below:

| Total Spend in the Year Ended 31st March 2021 | Full year Outturn 2020-21 £ | Full year Outturn 2019-20 £ |
|---|-----------------------------------|-----------------------------------|
| Staff / Salary costs | 1,267,469 | 4,136,124 |
| Travel costs | 156 | 31,795 |
| Professional fees | 15,091 | 48,266 |
| IT costs | 219,099 | 502,541 |
| Buildings | - | 301,265 |
| Total | 1,501,815 | 5,019,991 |



Image credit – Getty Images

Changes in expenditure between years reflect the changes in the nature of the work required to prepare UKRI for EU Exit and external factors arising from the global pandemic.

On the former, in 2019-20 UKRI activity centered on the **EU's Horizon 2020 (H2020)** programme which ceased in December 2020. Our H2020 programme entailed significant activity to prepare UKRI to onboard a large volume of grants quickly, including preparing systems and estates to accommodate new operations. In 2020-21, having reached a transitional agreement regarding EU research funding UKRI re-focused to consider its successor programme, **Horizon Europe**, which required a different resource profile and did not entail the same level of operational impact.

- staff costs reduced as people deployed into the programme were either exited (agency staff) or re-deployed elsewhere in UKRI as our objectives changed in 2020-21
- travel costs reduced given the reduced number of people deployed to the programme and constraints on travel brought about by the COVID-19 pandemic
- UKRI incurred building costs in 2019-20 directly associated to the programme to reconfigure office space to prepare for a potential new grant operations team that may have been required to replace the Horizon 2020 programme which ceased in December 2020; this work was completed in 2019-20 and no further change was required in 2020-21
- the programme also incurred reducing IT spend in 2020-21 for the cost of change to grant funding systems specifically required to prepare for EU Exit.

EU Exit Staff Redeployment:

| Movement onto EU Exit work | CS grade equivalent | | | | |
|----------------------------|---------------------|------|---------|-------|-------------|
| | AA/AO | EO | HEO/SEO | G6/G7 | Grand Total |
| 2019-20 | 33.1 | 21.5 | 20.3 | 4.7 | 79.5 |
| 2020-21 | 0.0 | 1.0 | 3.6 | 2.0 | 6.6 |

Risk

Key Themes

Strategic

Making the evidence-based case for further investment in research and innovation to deliver the Government's long-term priorities and maintain our position as a world leader

Operational

Ensuring that day-to-day operations are effective and efficient

Programme

Ensuring our major programmes/projects are managed effectively

Effective risk management is essential to enabling us to deliver against our vision and mission. Our goal, through early identification and active management of risks in relation to our operational context, across the organisation, is to ensure that we can anticipate any impacts to the delivery of our identified priorities, plan mitigations, and more effectively manage issues should they arise. As a steward of the research and innovation system, we are responsible for looking inward, and outward, to ensure that we identify key risks influencing across the system. We continue to monitor how these risks change through the year and any emerging risks affecting performance.

Risk Management Framework

As part of our governance (page 109) UKRI operates a risk management framework which expects risk to be owned at the lowest level of authority able to direct resources to address a risk, taking consideration of the complex structure of UKRI. Risks are managed locally within Councils, Institutes and Programmes through their existing governance structures. UKRI Risk Business Partners are working to ensure that there is coordination and a clear line of sight of risk across UKRI's complex organisation, and oversight from relevant committees.

Risk Appetite

We recognise as an organisation that we must take risks to achieve our objectives, and to manage this we introduced a revised risk appetite statement in June 2020. The appetite statement translates into escalation levels, with risks above appetite requiring escalations and a mitigation plan. We must take risks in a controlled manner, reducing exposure to a level deemed acceptable by the UKRI Board. By defining its risk appetite UKRI can set boundaries for risk-taking. The appetite will vary depending on the type of risk.

Currently there are a total of 1,492 risks recorded in registers across UKRI, which are managed and escalated following standard governance structures and using the Risk Appetite Statement. The top-level risks to UKRI are documented on the Corporate Risk Register and categorised by three high level themes – Strategic, Operational and Programme. There are 26 risks on the register currently, with 9 sitting above appetite. These risks are reviewed by ExCo and ARAPC on a regular basis. The Committees will discuss the risks that are above appetite as well as the mitigating plans in place, to ensure we are taking appropriate action to reduce the risk within appetite.

The risks presented below are the top three risks in each high-level category from the Corporate Risk Register

Strategic

Risk and mitigating actions

Spending Review Allocations

There was a risk that the outcome of the 2020 Spending Review would not match the expectations of the research and innovation (R&I) community or enable UKRI to meet its commitments for delivery in 2021 and beyond. In the first half of the year UKRI built the case for investment in the core Research England, Research Council and Innovate UK budgets that underpin the R&I system, and for strategic programmes relevant to the UK R&D roadmap.

The settlement from the Department for Business, Energy and Industrial Strategy (BEIS) in November provided welcome certainty for three years on core budgets, but the allocations process could not begin without clarity on the impact of association to Horizon Europe. The announcement of £250 million in additional funding on 1 April 2021 means that councils will receive an uplift for inflation and that strategic programmes have been able to continue as planned, although new initiatives are highly constrained.

**Appetite
(current position)**

This risk has been above appetite since it was raised. The mitigating actions focused on the impacts and the current score is reflective of operating expenditure constraints.

**Severity and
direction of trend**

This is a new risk, with a changing score throughout the year. This has **increased** as a result of a reduced overall settlement then decreased following later budgetary announcements. Currently, the risk score reflects an increase.



COVID-19 Response

The outbreak of the COVID-19 pandemic at the beginning of the year created risk to the delivery of existing programmes and substantial demand for new interventions to enable researchers and innovators to have maximum impact in the response. Significant work was undertaken to provide continuity loans and grants to innovative businesses, increase support for PhD students, extend research grants, and design and implement research sustainability packages for HEIs and specialist institutions. UKRI sufficiently mitigated the in-year risks but enters the new financial year with a significant tail of financial commitments, creating pressures on core budgets.

This risk is above appetite, noting that a true assessment of the impact of our actions vs risk appetite will only be possible post-pandemic.

This is a new risk this year, now at a **stable state** with embedded controls and monitoring.



Engagement with the Research & Innovation Community

The approach UKRI has taken to engagement with its community has had to adapt to remote working in the same way many other areas have this year. To support and enable engagement with its community, UKRI has an established communications and engagement directorate, with a Communications and Engagement Strategy approved by ExCo and signed off by the UKRI Board, supported by a Public Engagement Vision. The UKRI brand and communication channels are established and embedded, enabling a tailored flow of information. Ensuring effective working between BEIS Comms and UKRI Comms is a shared priority, and a 'ways of working' protocol is in development to ensure a coordinated approach.

This risk is above appetite, with mitigating action plans in place to reduce the score such as a new Comms and Public Engagement Strategy.

This risk, although **stable**, requires regular review due to the changeable nature of our communication priorities.



Risk and mitigating actions

Subsidy Control and State Aid

New Subsidy Control legislation came into force in January 2021. Innovate UK has taken the lead on Subsidy Control for UKRI, adhering to guidance issued by BEIS and horizon scanning for changes; and applying new policy flexibilities provided for under the new Subsidy Control regime. Throughout, UKRI have maintained a strong audit trail to ensure UKRI can meet reporting requirements. Advice is available from the Innovate UK Subsidy Compliance team who act as subject matter experts in support of activity across UKRI. UKRI also participated in the recent BEIS formal consultation process on the creation of a UK Subsidy Control framework which will be implemented once published.

**Appetite
(current position)**

This risk is above appetite currently, awaiting details of Subsidy Control regulations.

**Severity and
direction of trend**

This risk has varied in score in the past year, recently **decreasing** as our control environment has matured.



Operational

Operational

Programme

Risk and mitigating actions

Appetite (current position)

Severity and direction of trend

Security Risk

UKRI continued to strengthen controls and mitigations in relation to information, physical and personnel security risks, in the context of growing cybersecurity threats and the need to adapt to new working practices in lockdown. An incident in January 2021 involving a failed ransomware attack caused temporary disruption, and the lessons learned have been incorporated into plans for the coming year. Security threats arising from activity by hostile states were also evaluated, and a new programme launched to implement the guidance on Trusted Research issued by the Centre for the Protection of National Infrastructure (CPNI).

This risk is currently above appetite, with action plans in place to reduce to within appetite by Autumn 2021.

This is a **new corporate risk**, bringing together all aspects of security, with developing controls.



Staff Capability and Capacity

UKRI has completed an analysis of the capability and capacity risks and vacancy data, demonstrating that the likelihood of this risk has reduced over the year. HR are working to address the pockets of risk existing in certain scientific, technical and professional groups, by working in partnership with council leadership teams to deliver specific, tailored interventions. This includes rolling out a workforce planning toolkit to better diagnose the issues and identify solutions; exploring pay flexibilities with BEIS to help with recruitment and retention of scientific staff; improving resourcing approaches to enhance the efficiency and effectiveness of recruitment, and; development of UKRI Employer Value Proposition (EVP) to enrich our attractiveness as an employer.

This risk is currently above appetite, with action plans in place to reduce to within appetite by Autumn 2021.

This risk has **reduced** in the last year, following the detailed analysis of capability and capacity, resulting in a more focused understanding of the impact on specific staff groups.



Risk and mitigating actions

Appetite (current position)

Severity and direction of trend

Long term delivery of Enterprise Resource Planning services

Following a number of delays driven by external events, UKRI has not been able to replace its eight legacy back office systems with an integrated Enterprise Resource Planning solution, and there is now a tight timeline to achieve this before current systems are out of support (expected to be December 2023). In response to this risk the SHARP programme (Services for HR, Accounting, Reporting and Procurement) was developed. Significant progress was made in the design of a solution that is fully aligned with the new Government Shared Services strategy. The business case has now been approved by BEIS and is awaiting Cabinet Office approval.

The delivery of the SHARP programme will bring this risk within appetite. BEIS has approved the business case and this is now subject to Cabinet Office approval.

This is a **new risk**, its severity reflects the nature of the system due to be replaced covering essential operations such as HR, pay and procurement.



Reduced ODA Research & Innovation Funding

The ODA allocation from BEIS to UKRI has reduced significantly in planned ODA expenditure for Financial Year 2021-22, leading to a £125m budget, upon initial assessment, and a £120m gap between allocations and commitments to grant holders. UKRI has had regard to the Public Sector Equality Duty at all stages, and has worked to safeguard the ethical considerations relating to research involving human and animal participants.

This risk is above appetite, noting that a true assessment of the impact of our actions vs risk appetite will only be possible when future ODA funding is confirmed.

This is a new risk in response to the reduced overall settlement and **is increasing**.



Industrial Strategy Challenge Fund (ISCF) Delivery

ISCF is a £3 billion initiative that is working with business and researchers to tackle some of the biggest challenges of our time – finding new solutions, creating jobs and building prosperity. The risk of not achieving the expected societal and economic impact for the UK economy is being well managed, and mitigated, through robust UKRI, BEIS and HM Treasury (HMT) governance and delivery arrangements, with emerging signs of impact being evidenced through interim evaluation activity. This will continue to be supported by implementing the recommendations from the National Audit Office Value for Money Study into 'UKRI's Management of the Industrial Strategy Challenge Fund'. There continues to be a risk around financial pressure in Financial Year 2022-23, and beyond.

This risk is within appetite based on ISCF's established governance structure and operating model.

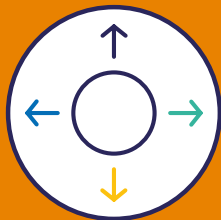
This risk is in a **stable state** with embedded controls and monitoring.



Performance Analysis

Reporting against the commitments and priorities in our Corporate Plan 2020-21

Reflecting our commitments in our Corporate Plan, the following sections describe how we have delivered over the year. For context, each section includes the ambitions we set to reflect progress against these key areas.

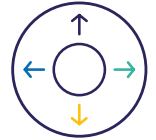


Convene and Catalyse

We have invested and worked in partnership, to bring people together to deliver excellent research. We have identified new opportunities for collaborative working and have continued to build strong foundations across the sector to ensure we support and enable talent to thrive across the research and innovation landscape, and within UKRI.

In addition to responding to global emergencies, included in the COVID-19 section above, in our Corporate Plan we set the ambition to:

- Strengthen networks across the research and innovation landscape
- Enable a dynamic, diverse and inclusive system of research and innovation
- Connect international communities
- Build an organisational culture and environment that enables us to recruit, include and support the best and diverse talent



Strengthening networks across the research and innovation landscape:

Collaborative working across a variety of businesses, researchers and other organisations provides a strong basis for partnerships that enable research ideas to translate into outcomes and lead to real world impact and increased prosperity. Our work to support this includes:

- funding cutting-edge innovation through the **Industrial Strategy Challenge Fund**, where:
 - 45% of all grants have both an academic and a business as a named partner
 - we have supported new partnerships through the **Next Generation Services Challenge**, with 73% of non-academic organisations funded through the challenge having never participated in UKRI funded projects
 - the **Commercialising Quantum Technologies** challenge is investing £153 million, supported by £205 million from industry, to develop new products and technologies based on advances in quantum science
 - the **Industrial Decarbonisation Challenge** recently announced £171 million funding to nine projects across the UK to help significantly reduce emissions in at least one UK industrial cluster by 2030
- helping businesses to improve their competitiveness and productivity through Knowledge Transfer Partnerships (KTPs). We awarded nearly 300 new partnerships across the UK, including management KTPs on behalf of BEIS
- supporting emerging technologies in university based settings to accelerate commercial applications in businesses by continued co-funding of **Innovation and Knowledge Centres**.



Collaborating on research commercialisation

A new collaboration between UKRI and the US Department of Commerce's National Institute of Standards and Technology (NIST) is set to **enhance UK-US scientific cooperation** by supporting trans-Atlantic staff exchanges, facilitating joint research programs and improving connections in areas such as **AI** and **advanced manufacturing**.

The collaboration is part of TenU, an international tech transfer program bringing together 10 top universities in the USA, UK and Belgium to tackle global challenges.

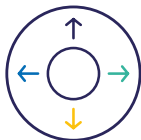
Image credits – Getty Images



Knowledge Transfer Partnerships enable firms to bring in new skills and the latest academic thinking to deliver a strategic innovation project, matching research associates with the business. **An evaluation found that each £1 of public investment generated an additional £7 to £8 in Gross Value Added.**

ICURe (Innovation to Commercialisation of University Research) accelerates the commercialisation of research by exploring the product market for emerging and innovative ideas, through providing support to academic teams to understand what is critical to future partners and customers. **The pilot has demonstrated returns of nearly £4 for every £1 invested.**

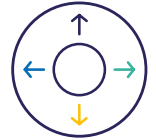
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**Table 2: Collaborations and type of collaborators**

Research collaborations might take the form of joint funding, exchanging expertise, access to wide-ranging facilities and equipment, accessing datasets, working across different sectors and bringing together the inter-disciplinary teams required to tackle complex problems. This indicator highlights new collaborations as reported after the award has started. It relates to the maturity of the multi-year grant, with the increase due to cumulative collaborations monitored over time. Researchers may also report collaborations that were in place at the point of application. Collaborations are only included in the indicator for the year the award started but the collaboration may continue for several years after this date.

| Year award started | | 2016 | 2017 | 2018 | 2019 | 2020 |
|-------------------------------|--|--------------|--------------|--------------|--------------|--------------|
| Instances of collaborations | | 6,627 | 7,361 | 5,405 | 3,946 | 1,827 |
| Instances of collaborators | | 8,866 | 10,806 | 7,614 | 5,576 | 2,475 |
| Types of Collaborators | Academic/University/Learned Society | 4,409 | 5,388 | 3,861 | 2,893 | 1,004 |
| | Charity/Non-Profit | 1,058 | 1,407 | 846 | 753 | 351 |
| | Other (including unknown) | 386 | 566 | 481 | 563 | 481 |
| | Private | 1,797 | 1,980 | 1,338 | 628 | 252 |
| | Public (including hospitals) | 1,216 | 1,465 | 1,089 | 739 | 387 |
| | Number of Awards reporting more than one collaboration | 2,011 | 1,968 | 1,671 | 1,313 | 685 |
| | Percentage of Total Awards reporting more than one collaboration | 55 | 51 | 46 | 39 | 19 |
| Total Number of Awards | | 3,688 | 3,830 | 3,623 | 3,400 | 3,544 |

- The data are not meant to be exhaustive of all outcomes realised by our grant funding in any single year, as outcomes data is reported over time and impacts are monitored over years, this is reflected in the descending numbers in recent years.
- Research Councils only.
- Definition of Collaboration, an interaction or set of interactions focused on a distinct project.
- Definition of Collaborator, all the participating institutions involved in collaborations.
- Total count of collaborations will be lower than the count of collaborators, as one collaboration can involve many collaborators.



Enabling a dynamic, diverse and inclusive R&I system:

We continue to deliver and build on how we support and enable talented people to thrive, working in partnership to ensure the R&I system, and all those who are part of it, have the best opportunities. (Further information on the Research and Innovation culture [here](#)). We:

- played an instrumental role in the delivery of the **Global Talent Visa** and ensured that the UK is able to **attract and retain global talent**. This includes through the new UKRI-operated 'endorsed funder' route for researchers and their teams working on grants from UKRI-recognised funders. Further development is ongoing to add additional funders
- brought 3,000 diverse members together in a new **Early Career Researcher (ECR) forum**. This has already begun to provide valuable insights for us on the challenges faced by ECRs and will help give them a greater voice in the research and innovation community and feed into UKRI decision-making
- continue to work with the Department for Business, Energy and Industrial Strategy (BEIS) to form a **People and Culture Strategy**, due to be published in Summer 2021, to ensure the UK is the **best place in the world for scientists, researchers and entrepreneurs to live and work**
- are challenging ourselves to work differently. Building on our transparency and accountability we established an **Equality, Diversity and Inclusion (EDI) programme board** and a working group for **Equality Impact Assessments** as part of work on the **Public Sector Equality Duty**
- **published our data for diversity characteristics of funding applicants and recipients in the last five years**. We are working towards enhancing our data collection and analysis capabilities to better inform our actions and interventions
- launched the **Forum for Tackling Bullying and Harassment in Research and Innovation** alongside partners both in the UK and internationally. We also clarified our expectations of organisations in our **Full Economic Cost grant and training grant terms and conditions** in November 2020.



Engaging audiences with Equality, Diversity and Inclusion (EDI) Research

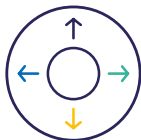
The Arts and Humanities Research Council (AHRC) has announced funding to allow researchers to further the impact of their EDI research. This investment will enable the EDI engagement fellows to develop a range of exciting engagement opportunities, including community workshops and a bespoke festival, and will connect academic research with communities across the UK to deliver a tangible impact on society and help shape future EDI policies.

Image credits – Getty Images



Funding under the Biotechnology and Biological Sciences Research Council (BBSRC) led agency agreement with the US National Science Foundation has supported a team co-led by the scientists who re-engineered the plastic-eating **enzyme PETase**. The team has now created an enzyme 'cocktail' which can digest plastic up to six times faster. PETase breaks down polyethylene terephthalate (PET) back into its building blocks, creating an opportunity to recycle plastic infinitely and **reduce plastic pollution and the greenhouse gases driving climate change**.

Image credits – Getty Images



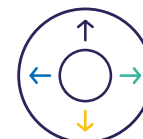
Funding provided through the **Fund for International Collaboration** is supporting collaborative, business-led research and development (R&D) projects with Israel, giving UK companies opportunities to work with high-growth Israeli counterparts and forge new connections. Another innovation area of investment in 2020 is the UK-US consortium working to reduce the cost and risk of offshore wind development.

Image credits – Getty Images

Connecting international communities:

In addition to our COVID-19 related activities, we have continued to **strengthen and build our collaborations with other international funding agencies and partners**, supporting co-development, co-funding and business-led R&D. Including:

- delivery of the **Global Challenges Research Fund (GCRF)** last year, supporting cutting-edge research and innovation that addresses the challenges faced by developing countries
- agreeing new collaborative agreements with partners in Canada and the US and developing new proposals for collaborative activity with our Swiss and Japanese partners
- **UKRI China** facilitated successful negotiations on the design and co-funding of programmes under the UK-China Healthy Ageing Flagship Challenge Programme with the Chinese Ministry of Science and Technology (MOST)
- **UKRI India** supported our councils in commissioning £18 million of new collaborative activity with India, including a new collaboration with the Indian Council for Social Science Research on the future of UK-India trade and cross-border investment
- awarding 148 research grants and 18 innovation projects through the **Fund for International Collaboration (FIC)**. This £160 million fund supports innovative UK companies to collaborate globally in established and emerging areas of interest, including high-value manufacturing, AI, quantum technologies and renewable energy
- in total, 4,992 awards report starting an international collaboration from 2016-2020 (28% of total awards) and 5,081 awards report a UK collaboration (28% of total awards).

**Table 3: UK and International Collaborators**

International collaboration shows that researchers are collaborating and exchanging expertise around the world and gaining access to international facilities and infrastructure. This indicator highlights new collaborations as reported after the award has started. It relates to the multi-year grant, with the increase due to cumulative collaborations monitored over time. Collaborations are only included in the year the award started but the collaboration may continue for several years after this date.

| Year award started | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|-------|-------|-------|-------|------|
| Number of Awards with only UK collaborators | 599 | 605 | 560 | 433 | 265 |
| Number of UK collaborators involved | 1,536 | 1,248 | 1,230 | 934 | 576 |
| Number of Awards with only International collaborators | 619 | 574 | 520 | 461 | 199 |
| Number of International collaborators involved | 1,191 | 1,219 | 1,028 | 810 | 362 |
| Number of Awards with both UK and International collaborators | 762 | 759 | 553 | 386 | 159 |
| Number of UK collaborators involved | 3,126 | 3,875 | 2,650 | 1,742 | 563 |
| Number of International collaborators involved | 2,686 | 3,879 | 2,204 | 1,509 | 491 |

- The data are not meant to be exhaustive of all outcomes realised by our grant funding in any single year, as outcomes data is reported over time and impacts are monitored over years, this is reflected in the descending numbers in recent years.
- Research Councils only.
- Data only includes collaborators where the location of the collaborator is known.

Building an organisational culture and environment that enables us to recruit, include and support the best and diverse talent

Staff Performance Report

Over the year, we have made significant progress to enhance, improve and build on our Human Resources function across the organisation. Our aim is to enable our people to fulfil their full potential, and as a result, support the organisation in achieving our goals. In addition to delivering COVID-19 activities, this has involved:

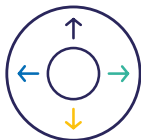
Supporting equality, diversity and inclusion (EDI) at UKRI.
We have:

- improved our EDI data and drafted our first Equal Pay Audit. This complements our Gender Pay Gap Report and helps the organisation better understand pay equality
- improved our EDI training provision and launched five new UKRI wide inclusion networks.



We have developed a **suite of organisation-wide staff networks** launched in April 2021 to build on and develop our culture of diversity and inclusion. Networks include: **Racial Inclusion and Striving for Equity (RISE), PRIDE, Disability Matters, UKRI Women's Chapter and the Parenting Network.**

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After extensive consultation, we have developed a new **Human Resources Target Operating Model**. This will support and enable managers, strengthen our capability in key areas, such as learning and development, EDI and talent management and will focus on improving our customer experience, processes and ways of working with our shared services partner, UK SBS.

Image credits – Getty Images

Ensuring that our **learning and development** approaches help **people fulfil their potential** we have:

- delivered a range of Management Development and Leadership programmes
- refreshed our core learning curriculum and universal learning requirements and introduced a new interim Learning Management System
- designed action plans to address the employer obligations within the Technician Commitment and the Researcher Development Concordat.

Modernising, streamlining and aligning our **pay and reward policies**, we have:

- aligned policies to wider organisational priorities, including reviewing our Travel and Subsistence policy in line with our Sustainability Strategy
- started developing a clearer Total Reward Framework to ensure staff better understand the pay and benefits package offered at UKRI.

Recruiting more efficiently and effectively, we have:

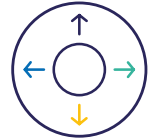
- adapted recruitment processes to respond to remote working, supporting managers in online recruitment and selection
- introduced a new cloud-based careers portal which aims to make the recruitment process easier and provide a more engaging recruitment journey for future employees.

Prioritising staff wellbeing across UKRI, we have:

- improved our Occupational Health provision, reviewed our Employee Assistance programme and improved our health promotion channels, delivering 'learning lunches' and all-staff webinars
- improved our wellbeing assessment capability, in partnership with Workwell, to inform an evidence-based approach to future wellbeing plans, and improved our Wellbeing at Work support packages, training and guidance to support resilience.

Supporting the development of our **workforce planning capability**, we have:

- aligned our activities with our Finance team for a longer-term workforce strategy, to increase our understanding of changing demands and enable better horizon-scanning of future skills needs. This will support improved capacity planning to ensure we have enough of the right skilled resources to deliver as an organisation



- started a pilot project through the Science and Technology Facilities Council, which includes the roll-out of a suite of tools to build a bottom-up view of current and future workforce needs.

Enhancing the **Talent** and **Performance Management** and **Early Careers** offering, we have:

- improved our presence on professional networking and job influencer sites to encourage applications and improve our employer brand, and piloted an augmented coach writing tool to support diversity and equality in our external job adverts
- improved our guidance and support for appraising performance, including specific coaching sessions on reviewing the performance of remote workers
- successfully recruited and on-boarded against all of our major early careers programmes and processed in excess of 4,000 applications
- launched two new corporate apprenticeship programmes in finance and project management.

Prioritising the Health and Safety (H&S) of our employees is a priority. The key UKRI forum for consultation, which meets our legal obligation, is the UKRI Health & Safety Consultation Committee (HSCC) co-chaired by the Chief Finance Officer and a full-time Trade Union (TU) appointed Safety Representative, who provides the link to our Safety Representative network. Over the year, we have worked alongside our TU appointed Health and Safety Representatives, who play an important role in ensuring we continue to provide a safe working environment for our staff, regardless of Trade Union membership. This includes:

- continuing our commitment to consult with staff on health H&S matters, as reflected in our H&S policy, and responding to any matters raised, whether in confidence with TU representatives or with council H&S Advisors
- continuing our consultation with TU Safety representatives at site level, as determined by respective councils, as well as centrally within UKRI
- consulting on the revision of the UKRI H&S policy and our H&S strategy, together with its goals and objectives and the development of H&S codes
- continuing to develop the UKRI H&S management system, working in concert with the H&S Management Committee, via scrutiny of UKRI H&S performance and reviewing progress with our wellbeing offering. Work will be taken forward in the next year to better align the HSCC activities with those of the Joint Negotiation and Consultation Committee (JNCC).



The Science and Technology Facilities Council was recognised by the Institute of Physics (IOP) receiving the **2020 Apprenticeship Employer Award** for Large employers.



Incentivise

We work in partnership to build a research and innovation system that provides strong foundations for excellent research and maximises research impact. Working to deliver in key areas, including policy, culture and commercialisation, we incentivise better choices and work to support the translation of research into outcomes that deliver real impact in our everyday lives.

In our Corporate Plan we set the ambition to

- Transform the way we maximise the impacts from research
- Build assurances for openness and integrity into the research system



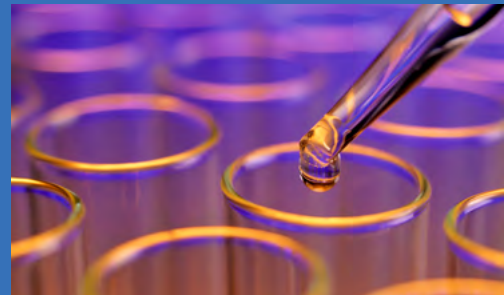
Transforming the way we maximise the impacts from research:

We have worked to **increase the impact of research and innovation** and incentivise businesses and researchers to **focus on major societal goals**, including:

- committing over £1 billion across 10 challenges that directly support the goal of achieving net zero carbon emissions by 2050 through the **Industrial Strategy Challenge Fund**. Projects range from reaching net zero in food production, to developing the world's leading net-zero carbon industrial cluster by 2040
- establishing a cross-UKRI commercialisation team and continuing development of a harmonised framework for commercialisation funding across UKRI programmes. The aim of the framework is to develop a UKRI continuum of funding to provide an inclusive, timely and seamless pathway of commercialisation funding across all of UKRI's remit
- supporting research organisations to assist knowledge exchange between researchers and businesses, including commercialisation, primarily through **Higher Education Innovation Funding (HEIF)** and the **Connecting Capabilities Fund (CCF)**
- providing researcher-led funding to support impact, translation and commercialisation through Impact Acceleration Accounts (IAAs), Follow-on Funds (FoFs), and the Developmental Pathway Funding Scheme (DPFS).

We have championed **citizen science**, actively encouraging work that enables **engagement between researchers and our wider society** by:

- providing funding through **Citizen Science Awards**, which supports co-design and delivery of research and innovation projects with the public
- funding **28 citizen science projects** and **25 projects** that included collaborative public engagement supported by **place-based partnerships**. Funded work through place-based partnerships supported projects that are driven by a geographically defined need in communities from the 40% most socioeconomically deprived areas of the UK.



The **Biomedical Catalyst** was created by the Medical Research Council and Innovate UK in 2012, to test and develop innovative technologies for healthcare. Evaluations show that **each public £1 invested by the catalyst in late stage, industry-led research and development generated £4.70 in wider economic benefits**.

Image credits – Getty Images



Women in Innovation Awards

In the third year of the competition, Innovate UK has awarded 40 women a one-year tailored package of financial support, mentoring and business growth opportunities. Winners were from every region and nation of the UK and are set to tackle some of our biggest societal challenges, helping the UK reach net zero and build back better post pandemic. Winning products and services include; technology to help young people better manage their money, eco-friendly period products, and an online community platform that tackles the issue of product shortages during COVID-19.



In 2020 we funded a **citizen science** project, led by the University of Nottingham, that used a cutting-edge virtual reality game, **Swat or Not?** to engage young people in the study of insects.

Image credits – Getty Images



Supporting placed-based partnerships, we provided funding for a project run by the University of Stirling, Glasgow School of Art and British Geological Survey (part of the Natural Environment Research Council) to understand the everyday energy challenges facing people in Clackmannanshire and to develop new ways to involve those often excluded from debates about climate change in discussions about achieving a low-carbon future.

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We have worked to **empower young people** to pursue careers and take part in research and innovation by:

- helping to support the network of **30,000 STEM Ambassadors** throughout the UK who act as role models for young people
- funding and hosting programmes of engagement including the Economic and Social Research Council's **Festival of Social Science** which brought together 34 partner organisations over 300 online events and the **British Science Association's (BSA) British Science Week** where we fund grants for disadvantaged schools and community groups from backgrounds that are underrepresented in science.

Building assurances for openness and integrity into the research system:

To support **excellence and best practice**, we:

- built on our **action plan for the Concordat to Support the Career Development of Researchers** with a **Technician Commitment Action Plan** that sets out our vision to recognise, celebrate and value the essential contribution that the diversity of technically skilled people makes across the research and innovation system
- hosted an international conference, with over 1,100 participants, on **Responsible Research Assessment** in partnership with South African National Research Foundation (NRF) and UK Forum for Responsible Research Metrics
- published the **UKRI Preventing Harm (Safeguarding) in Research and Innovation Policy** which will be implemented in early 2022
- highlighted the essential role incentives play through our commissioned report **Research Integrity: a landscape study**, published in June 2020, and will continue to work with the **Concordat to Support Research Integrity Signatories Group** to inform how UKRI can further support incentivising and promoting research integrity
- contributed to the development of the **Science Europe Strategy** for the next five years and worked with colleagues across Europe to shape and influence wider research and innovation policy.



To support the development of a positive **Research and Innovation (R&I) Culture** and **attract, develop and support talented people**, we are working to:

- embed culture considerations into everyday practice across the organisation, review reward and recognition systems and processes and support the sector to take on board considerations around R&I culture. We are also working to support a more harmonised approach to the assessment of applicants to UKRI opportunities, and aim to provide a better way for them to evidence their contributions to research and innovation, through the **Résumé for Researchers & Innovators**, including launching the **Good Research Resources Hub**.

To mitigate risks and protect against threats to the **thriving and collaborative international research and innovation sector** we:

- initiated our **Trusted Research and Innovation** programme, which includes those that we fund and our own research, conducted in the UK and with our international partners
- we have worked to strengthen our existing controls, raise awareness of Trusted Research amongst our staff and bring together a programme of activity from across the organisation, including:
 - piloting a risk-based grant application review mechanism, which will be used to strengthen processes across the rest of UKRI's grant application portfolio
 - reviewing our grant terms and conditions to emphasise the responsibilities of those that we fund to have proportionate and clear policies related to Trusted Research (following the latest government guidance)
 - appointed Siobhan Peters, the CFO, as the UKRI Board's security champion, recognising the importance of Trusted Research.



In 2020, UKRI became the first funder to sign the **Technician Commitment**, which seeks to provide greater visibility of the vital work of the UK's technician workforce, over 2,000 of whom work across our councils' facilities, estates, centres and campuses.

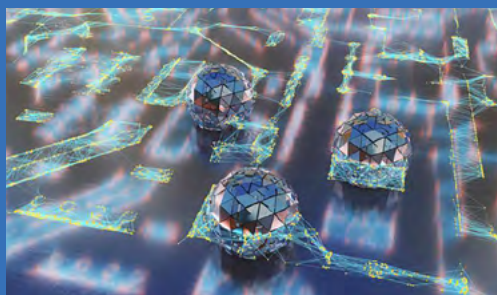
Image credits – Getty Images



Working in partnership to improve inclusion and diversity

Through the Digital Innovation Hub Programme, funded by UKRI's Industrial Strategy Challenge Fund, Health Data Research UK is leading on the 10,000 Black Interns programme, to improve inclusion and diversity in the health data science sector by offering internships with partner organisations for young Black people. These paid internships are a critical way to offer practical work experience, training and development opportunities.

Image credits – Getty Images



Through Innovate UK, we launched a **new competition to advance the commercialisation of projects in quantum**. Funded through the Industrial Strategy Challenge Fund for commercialising quantum technologies, with a significant investment from industry, the £153 million fund aims to advance the commercialisation of technologies, remove technical barriers and deliver new products and services.

Image credits – Getty Images

Working to support **knowledge sharing, transparency and openness** in research and how we **publish research**, we have:

- reviewed our Open Access policies based on evidence to date and public consultation to create a single UKRI policy for research publications, and worked with a selection of UK government departments to align open access approaches to achieve the Government ambition of open access to publicly funded research
- worked to modernise our research evaluation policy, including working to harmonise our policies and processes with the **San Francisco Declaration on Research Assessment (DORA)** and leading a taskforce on responsible research assessment as part of our membership of **cOAlition S**, a collaborative initiative working to make full and immediate Open Access to research publications a reality
- worked with the Foreign, Commonwealth and Development Office (FCDO) and the National Institute for Health Research to commission a study to inform UKRI approaches to Open Access in low- and middle-income countries.

Table 4: Engagement Activities

Researchers engage with a wide variety of audiences and stakeholders to communicate research outcomes, disseminate knowledge, stimulate public awareness, and encourage public engagement and dialogue. The engagement activities indicator helps demonstrate the extent to which researchers are engaging with others, including audiences outside academia.

| Year award started | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|--------------|--------------|--------------|--------------|--------------|
| Instances of Engagement activities | 36,032 | 40,853 | 23,400 | 17,837 | 4,668 |
| Number of Awards reporting more than one Engagement Activity | 2,573 | 2,616 | 2,275 | 1,780 | 946 |
| Percentage of Awards reporting more than one Engagement Activity | 70 | 68 | 63 | 52 | 27 |
| Total Awards | 3,688 | 3,830 | 3,623 | 3,400 | 3,544 |

- The data are not meant to be exhaustive of all outcomes realised by our grant funding in any single year as outcomes data is reported over time and impacts are monitored over years, this is reflected in the descending numbers in recent years.
- Research Councils only.

**Table 5: Knowledge Output**

To support our understanding of the impact of our research, we measure the number of publications our researchers publish each year. This supports the dissemination of research findings to a wider audience and increases the visibility of research.

| Year Award Started | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|--------------|--------------|--------------|--------------|--------------|
| Book Chapters | 1,650 | 1,333 | 846 | 492 | 91 |
| Books | 634 | 482 | 293 | 186 | 39 |
| Journal Articles | 42,151 | 42,602 | 26,947 | 14,865 | 3,512 |
| Other (includes for example edited book, conference paper, policy briefing.) | 7,812 | 10,227 | 5,649 | 4,469 | 1,047 |
| Total Instances of Publications | 52,247 | 54,644 | 33,735 | 20,012 | 4,689 |
| Number of Awards reporting more than one Publication | 3,312 | 3,312 | 2,908 | 2,136 | 933 |
| Percentage of Total Awards with more than one Publication | 84 | 69 | 65 | 54 | 24 |
| Total Awards | 3,922 | 4,831 | 4,508 | 3,954 | 3,866 |

- The data are not meant to be exhaustive of all outcomes realised by our grant funding in any single year as outcomes data is reported over time and impacts are monitored over years, this is reflected in the descending numbers in recent years.
- Research Councils and Innovate UK.
- Instances of publications are not a count of unique publications. Duplicate publications may occur where different researchers have entered similar information independently of one another. Publications may also occur from more than one award. Efforts have been made to remove some duplications using the Digital Object Identifier (DOI), but not all publications have a DOI.

Table 6: Other Types of Knowledge Output

| Year Award Started | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|--------------|--------------|--------------|--------------|--------------|
| Artistic and Creative | 1,218 | 1,497 | 832 | 676 | 342 |
| Medical Products, Interventions and Clinical Trials | 101 | 116 | 111 | 42 | 26 |
| Research Models and Databases | 1,929 | 2,297 | 1,678 | 824 | 317 |
| Research Tools and Methods | 1,091 | 1,408 | 1,058 | 483 | 244 |
| Software and Technical Products | 812 | 922 | 775 | 330 | 127 |
| Total Instances of Other Knowledge Output | 5,151 | 6,240 | 4,454 | 2,355 | 1,056 |
| Number of awards reporting at least one instance of Knowledge Output | 1,616 | 1,644 | 1,387 | 936 | 412 |
| Percentage of Total awards with at least one instance of Knowledge Output | 44 | 43 | 38 | 28 | 12 |
| Total Awards | 3,688 | 3,830 | 3,623 | 3,400 | 3,544 |

- In addition to Publications we measure different ways in which our research translates into types of knowledge outputs across the research and innovation sector. Other types of knowledge generation are included above.
- The data are not meant to be exhaustive of all outcomes realised by our grant funding in any single year, as outcomes data is reported over time and impacts are monitored over years, this is reflected in the descending numbers in recent years.
- Research Councils only.



Invest

We have invested across the system, supporting people, building capability and working to deliver cross-cutting impact and support regional growth. We also seek to improve how we fund, working to improve our processes and how we support our communities.

In our Corporate Plan we set the ambition to:

- Invest in the best people, ideas and infrastructure
- Apply a place-based lens to what we do
- Improve what we do and how we do it



Investing in people:

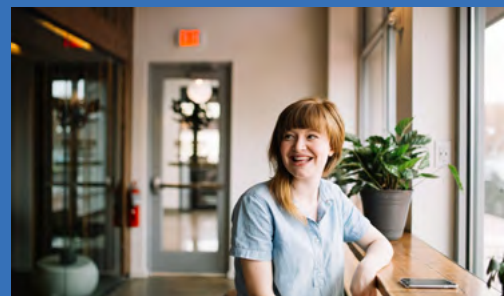
We have continued to invest in people, with over £504 million invested in **talent programmes** in 2020-21. This year, as a result of COVID-19 impacts, we have worked to support those we fund through costed and no-cost grant extensions. As a result, the data reflecting the total number of doctoral studentships and fellowships we support has increased in comparison to previous years. This includes over 29,000 doctoral students, while our research councils support over 1800 fellowships at multiple career stages. Complementing direct talent investments, Research England's quality-related funding sustains infrastructure and the broader research environment. Activities this year include:

- announcing that international students will be eligible for all research council postgraduate programmes from the start of the academic year 2021/22
- maintaining our position as the **foremost funder for doctoral training in the UK**, with over 5,000 students beginning their studies in academic year 2021/22, through mechanisms that include **Doctoral Training Partnerships, Centres for Doctoral Training (CDTs)**, and collaborative industry schemes. Through Research England we invested a further £260 million in doctoral training in England through **quality-related funding**
- 188 awards as part of rounds three and four of our **Future Leaders Fellowships (FLF) scheme**, including 16 fellows employed in business
- awarding **Edinburgh Innovations** a £2.8 million contract to deliver the **FLF Cohort Development Network**. The team is a partnership across nine organisations in all four nations and will create a strong cohort experience for the fellows
- awarding 15 **Turing AI Acceleration Fellowships**, through the Engineering and Physical Sciences Research Council. The fellows will develop cutting-edge artificial intelligence (AI) technologies in areas including combatting cancer, improving cybersecurity and understanding air pollution.



Through the **Future Leaders Fellowships scheme**, UKRI has funded researchers at the Science and Technology Facilities Council's UK Astronomy Technology Centre (UK ATC), who are developing methods to 3D-print lightweight mirrors for space telescopes, pushing the boundaries of astronomy research.

Image credits – Getty Images



We funded 37 awards totalling £5 million as part of the first round of the **Innovation Scholars** programme. Delivered through the Medical Research Council, Biotechnology and Biological Sciences Research Council and Economic and Social Research Council, a second call was launched in Autumn 2020, with secondments due to begin in June 2021.

Image credits – Getty Images



Table 7: Funding decisions 2018-19 to 2020-21

| | | 2018-19 | | | 2019-20 | | | 2020-21 Totals Exclude and (Include) COVID-19 | | |
|--|---------------|-------------------------------|-----------------------------|--------------|-------------------------------|-----------------------------|--------------|--|-----------------------------|--------------|
| | | Competitive funding decisions | Successful decision to fund | Award Rate % | Competitive funding decisions | Successful decision to fund | Award Rate % | Competitive funding decisions | Successful decision to fund | Award Rate % |
| Research and Innovation Awards | By Number | 17,225 | 4,653 | 27 | 15,450 | 3,829 | 25 | 19,497 | 4,144 | 21 |
| | By Value (£m) | 9,921 | 2,843 | 29 | 8,325 | 2,566 | 31 | 10,046 | 2,770 | 28 |
| Fellowships | By Number | 1,903 | 440 | 23 | 2,042 | 441 | 22 | 2,355 | 524 | 22 |
| | By Value (£m) | 1,157 | 210 | 18 | 1,352 | 252 | 19 | 1,641 | 351 | 21 |
| COVID-19 Rapid Response & UKRI response to COVID | By Number | | | | | | | 17,256 | 3,381 | 20 |
| | By Value (£m) | | | | | | | 2,931 | 551 | 19 |
| Total | By Number | 19,128 | 5,093 | 27 | 17,492 | 4,270 | 24 | 21,852 (39,108) | 4,668 (8,049) | 21 (21) |
| Total | By Value (£m) | 11,078 | 3,053 | 28 | 9,677 | 2,818 | 29 | 11,687 (14,618) | 3,121 (3,671) | 26 (25) |

- Includes competitive funding data for Research Councils, Innovate UK, and Research England.
- The number of funding decisions made is not directly comparable to applications received in the Financial Year as there is a time delay between receiving an application and a funding decision.
- The numbers represent the number of awards on the 1st April 2021. Due to external factors some awards may not result in funding to applicants.



Table 8: Number of Research Council-funded PhDs submitted by calendar year

| Year Submitted | Number of PhDs submitted |
|----------------|--------------------------|
| 2016 | 4,330 |
| 2017 | 4,424 |
| 2018 | 4,710 |
| 2019 | 4,567 |
| 2020 | 1,071 |

- There is a time lag between a student submitting their PhD and the student submission survey being completed. The numbers in 2020 are lower and we expect this to increase over time.

Investing in the best Ideas:

Our funds **support opportunities for collaboration, and fund key activities** to address pressing challenges through **challenge-led** and **curiosity-driven research**. Activities this year include:

- bringing support from the £830 million **Strategic Priorities Fund (SPF)** to a total of over 550 projects, involving 700 organisations across areas as diverse as clean environment and trustworthy autonomous systems. This includes work delivered across councils to fund and deliver on challenges, for example, awarding funding to establish **five Greenhouse Gas Removal (GGR) Demonstrators**. Programmes have experienced differing impact from the pandemic, with some agile enough to pivot and refocus activities to maximise opportunities to contribute to our understanding of the Coronavirus and its impacts. Thirty-three SPF programmes are in delivery phase with one now completed
- delivering through all three waves of the £2.8 billion **Industrial Strategy Challenge Fund (ISCF)**, which has attracted a further £2.8 billion in industry co-investment, including launching the £147 million **Manufacturing Made Smarter Challenge** to boost productivity in businesses through digital technologies. Responding quickly to COVID-19, we agreed extensions and interventions to protect our investments, and enabled challenges to pivot to the new context.



Building Back Greener

Innovate UK's Sustainable Innovation Fund is investing £134 million to ensure the UK's greenest, most innovative businesses continue to thrive during the pandemic.

The investment is supporting 1,069 groundbreaking clean growth projects, creating new jobs, driving productivity and tackling climate change.

Image credits – Getty Images



The Audience of the Future Challenge

UKRI has invested £39.3 million in the development of new immersive technologies, including virtual, augmented and mixed reality. During the COVID-19 pandemic, the challenge pivoted its four immersive technology demonstrators from in-person to remote audiences, pioneering new ways for the creative industries to tell stories through interactive and immersive technologies.

Projects include Dream, a live, online performance inspired by Shakespeare's A Midsummer Night's Dream, delivered in collaboration with the Royal Shakespeare Company.



Table 9: Project partner contributions on authorised awards in 2020-21

This shows the project partner contributions for successful decisions:

| Project Partner Sector | Number of Awards | Total Partnerships | Project Partner Organisations | Total Contribution £m |
|--|------------------|--------------------|-------------------------------|-----------------------|
| Academic/University/ Learned Society | 663 | 1,477 | 769 | 237 |
| Charity/Non-profit | 154 | 238 | 193 | 8 |
| Private | 2,439 | 4,572 | 3,604 | 991 |
| Public (Including NHS Trusts) | 419 | 780 | 473 | 67 |
| Other (including unknown) | 558 | 1,179 | 1,010 | 45 |
| Total - including Research England project partners | 3,142 | 8,246 | 6,049 | 1,389 |

- Project partner organisations is the count of unique organisations involved in partnerships; organisations may be involved in more than one partnership.
- Research England do not attribute co-investment to a project partner, and so are unable to give counts or partnerships and organisations within the different sectors.
- Total awards are lower than the sum of awards across sectors as one award can involve many project partners from different sectors.



GeoEnergy Test Bed

Supported by funding through Innovate UK and working in partnership with the British Geological Survey, University of Leicester and University of Nottingham, the **Energy Research Accelerator**-funded **GeoEnergy Test Bed** provides a unique national facility to develop, test and validate technologies critical to the field of geenergy. This work aims to contribute towards developing new technologies that will deliver low-carbon solutions, such as CO2 storage.

Image credits – Getty Images

Investing in the best Infrastructure:

Building capability across the system and **enabling and supporting excellence**, we have:

- established a new **Infrastructure Advisory Committee (IAC)** which advises our decision-making boards on infrastructure investments and portfolio options which meet the criteria of the UKRI Infrastructure Fund
- established a prioritisation process for our significant infrastructure investments drawing on **UKRI’s Opportunities to Grow our Capability** report
- secured an additional £300 million **World Class Labs** funding, brought forward to upgrade scientific infrastructure across the UK including £27 million for new supercomputing hardware for the **Distributed Research using Advanced Computing (DiRAC), Baskerville** and **Sulis High Performing Computing** services
- directed funding to the modernisation of and investments in renewable energy at research sites, vessels, aircraft and labs as part of a commitment to environmental sustainability, including £33.5 million on estates, £13.5 million to support Natural Environment Research Council estates and £20 million for Science and Technology Facilities Council estates



- provided support for the modernising of galleries, libraries, archives and museums, using innovation to safeguard our future and serving local communities for generations
- developed plans for a **National Digital Research Infrastructure (DRI)**. This has been heavily dominated by COVID-19 activities this year, such as work by Health Data Research UK (HDRUK) in collaboration with the Office for National Statistics, UKRI, and National Institute for Health Research (NIHR) to use national data to answer key questions such as the effectiveness of vaccines.

Investing in regional growth: Strength in Places Fund (SIPF)

Research and innovation have the potential to play a central role in levelling up the UK. Working to progress national objectives, create high-value jobs and boost productivity, we have continued to work with partners across the country to identify and back opportunities for research and innovation-led growth. Our focus has been on backing local strengths that are nationally and internationally competitive through high-impact collaborations between research organisations, industry and local leadership.

In addition to continuing to deliver a diverse portfolio of activities, key highlights include:

- investing £186 million through wave 1 of the **Strength in Places Fund (SIPF)** into seven R&D initiatives focused on driving economic growth in all four nations of the UK
- delivering bid development support to 17 SIPF projects as part of the competition for the second wave of funding. Funding decisions are due shortly and are anticipated in Summer 2021.



Powering the future of offshore wind farms

Large offshore wind farms are set to play a significant role in the UK's target of net zero greenhouse emissions by 2050. Funded by Engineering and Physical Sciences Research Council (EPSRC) and supported by Science and Technology Facilities Council (STFC) researchers, the MAXFARM (MAXimising wind Farm Aerodynamic Resource via advanced Modelling) project is improving our understanding of wind farm performance, reducing design and operational costs and helping the UK take a leading role in wind farm design.

Image credits – Getty Images



SIPF investment has funded **The Living Laboratory** in Glasgow, which aims to increase cross-sector collaboration in precision medicine and turn research into treatments, benefiting patients and making savings for the NHS locally and across Scotland. **The Lab is projected to deliver 446 high-value jobs and add £136 million to the local economy over eight years.**



The **RoB Portfolio** includes a series of projects focused on making our operations simpler and better, to the benefit of our staff and stakeholders. In 2020, we launched and trialed **The Careers Portal**, which aims to support our ability to fill vital roles and offer a route into careers development within UKRI and the wider research community.

The Careers Portal was trialed by the Science and Technology Facilities Council (STFC), running an Early Careers fast-track recruitment exercise for 80 roles. The trial was run over six weeks, receiving 2800 applications with a relatively low error rate in the recruitment process.

Image credits – Getty Images

Improving what we do and how we do it:

How we work informs and supports how we deliver across the research and innovation landscape. By investing in and improving how we work, we are better able to deliver on our priorities, support our communities and ensure we maximise the impact and value we are able to deliver through our ongoing activities.

Continuing to **improve on how we deliver services**, we have:

- created the **Reforming our Business (RoB)** portfolio bringing together all our major operational change projects and programmes.

Working to **simplify and improve our business processes**, we announced a suite of commitments to **reduce bureaucracy at all stages of our funding processes**. We have trialed several new ways of working through our **Simpler and Better Funding Programme** and through our response to COVID-19. Working to streamline and harmonise how we fund, we have:

- delivered work to make it easier for researchers, innovators and their institutions to collaborate, submit applications, and obtain guidance in a joined-up way, successfully completing the first pilot of a new digital funding platform through Arts and Humanities Research Council's (AHRC) **New Generation Thinkers programme**
- piloted changes to reduce bureaucracy and simplify grant application opportunities, such as the Engineering and Physical Sciences Research Council (EPSRC) **New Horizons scheme**
- developed and launched a rapid call for Discovery Science Funding through the Natural Environment Research Council (NERC). The **Pushing the Frontiers pilot scheme** used a dual-stream approach to ensure both Established and Early Career Research applicants could access it.

We have continued to **build capability within UKRI to ensure we can meet and deliver on our priorities**. This year we:

- continued to develop **UKRI's Project Delivery and Improvement (PD&I) Function**, which supports the organisation to successfully manage, monitor, report and deliver a range of strategic activities. Over the past year, out of 57 major projects, just under half (25) have had no change to their overall delivery confidence. Of those which have changed, some have improved and some have lower confidence. Almost all the changes are the result of impacts of COVID-19, either on activity or funding reprofiles. We are continuing to monitor and manage projects to support improvements across project delivery.



- established several new operational teams to support the development and delivery of our activities, including a **Business Case Hub**, a **Continuous Improvement Team** and a **Business Continuity team**
- established an **improved method of procurement pipeline reporting**, built our **in-house procurement capability** and published a **procurement policy and process** that supports staff, provides an improved user experience and reduces cycle time, enabling better capacity planning and supporting compliance and commercial assurance
- developed our **in-house sourcing team** capability to support complex procurements, contract management process improvement and contract management training.

In addition to the ongoing development of our Performance Management Framework (p. 87-88), we have continued **working to generate, promote and incorporate the best evidence** to inform how we deliver research and innovation. We have:

- commissioned overarching fund-level evaluations of the Strategic Priorities Fund, Strength in Places Fund, Industrial Strategy Challenge Fund, Fund for International Collaboration, and a scoping study for the evaluation of the Future Leaders Fellowships. These evaluations will deliver insights on the impact of these programmes, and what works for delivering impactful research and innovation in a range of areas over the next five years
- agreed three key priority areas for our first phase of UKRI's **What Works for Research and Innovation** programme. We have commissioned two research projects to synthesise existing evidence on 'what works' covering the role of research and innovation in levelling-up regions and driving economic growth, and are in the process of commissioning a third on complex and cross-cutting challenge areas.

Building on our ability to **understand and analyse, report and inform decision-making**, we have:

- continued to build on the UKRI Data Hub's capability to be a governed, single consistent version of our data to underpin analysis. This will help to provide a greater understanding of the data we hold, informing publications on our regional investments to understand how places are benefiting from our funding, and comprehensive analysis of the diversity of our applicants and awardees. We have begun developing a UKRI Administrative Data Strategy to continuously improve the quality of our data and data products.

Key highlights from pilots and improvements include:

■ Open Research and Contributor Identifier (ORCID)

The free unique identifiers issuer **capability has been enhanced**, allowing researchers to link their reviewer data to their profiles, better recognising their important contributions to the peer review process.

■ New Generation Thinkers programme:

88% of applicants report that they found the system intuitive and easy to use.

■ New Horizons scheme

84% of applicants report it took less time and 93% found the submission process easier.

■ Pushing the Frontiers pilot scheme

41% of reviewers reported a time saving of up to 20% when assessing the streamlined pilot applications.



Conduct

Our funded centres, units and institutes deliver critical capabilities, support collaboration across the sector and enable the delivery of cutting-edge research and innovation.

In our Corporate Plan we set the ambition to:

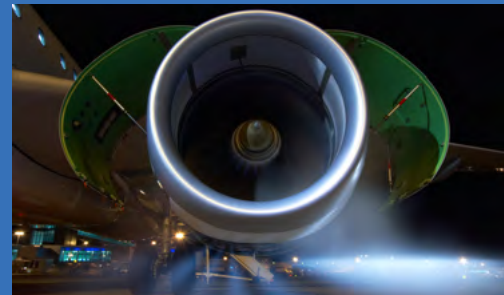
- Provide critical support as part of the national response to COVID-19
- Continue to support and provide funding to centres, units and facilities to support excellent research and innovation



Our Facilities and Institutes:

The work of UKRI's institutes, laboratories, centres, and units has been critical in our response to the COVID-19 pandemic. Contributions to the national effort include:

- researchers at the Biotechnology and Biological Sciences Research Council (BBSRC)-funded **Quadram Institute Bioscience (QIB)**, are part of the COVID-19 Genomics UK (COG-UK) Consortium. The Consortium works collaboratively to provide sequencing and analysis capability, sequencing over 2,000 samples from patients who had tested positive for COVID-19 in six months. QIB researchers are also pioneering new methods to conduct rapid virus detection to improve population testing and virus surveillance
- researchers at **The Pirbright Institute** (BBSRC) and the **Babraham Institute** (BBSRC) independently demonstrated that two doses of the Oxford University vaccine produce a greater antibody response than a single dose, in different models
- researchers at **The Roslin Institute** (BBSRC) demonstrated that face coverings can block up to 99.9% of COVID-19 linked droplets. Additionally, researchers at Roslin are developing a UK-wide system for testing sewage to predict local coronavirus outbreaks before they reach hospitals
- the Science and Technology Facilities Council (STFC) **Hartree Centre** provided supercomputing power to assist with the **Folding@Home** project. Through a network of global volunteers, unused background capacity from personal computers was harnessed to power simulations to see how potential COVID-19 drugs interact with key proteins. Supercomputing capabilities help to design and generate these potential drugs at speed, enabling faster results.



AI Tools for Engineering Production

Researchers at STFC's **Hartree Centre** and the Virtual Engineering Centre are working with Airbus to apply state-of-the-art artificial intelligence (AI) and data visualisation to their production process.

The project uses data analytics to anticipate manufacturing disruption, accelerate problem-solving and improve production efficiency.

Image credits – Getty Images



The Productivity Institute

The new state-of-the-art Productivity Institute based at the University of Manchester and includes partner institutions and policy partners across the country, is working to identify barriers to increasing productivity levels across the UK following the coronavirus crisis. Announced in August 2020 with £26 million of Economic and Social Research Council (ESRC) funding, and a further £6 million being provided by the Alliance Manchester Business School-led consortium, the Institute represents the largest ever economic and social research investment in the UK.



Under the overall coordination of the **Satellite Applications Catapult** team, Excelerate Technology is leading work to design, develop and deliver major advancements in coastal connectivity. Excelerate will **deploy an advanced wireless network** along a section of the coast to improve safety and track patterns of usage, which will **help first responder community and organisations** including the Royal National Lifeboat Institution (RNLI).

Image credits – Getty Images

Catapult Network:

Our £240 million investment in the **Catapult Network** through Innovate UK has helped to underpin R&D activity in sectors affected by the pandemic and has enabled businesses to access the expertise and facilities needed to accelerate the economic recovery. Activities this year include:

- through the **Medicines Discovery Catapult** we led the coordination of the creation of the UK's **Lighthouse Labs Network** and the delivery of a **testing lab in Cheshire**. Over 30,000 COVID-19 tests per day are performed on this site alone, completing four million samples only seven months after the government announcement of a national testing effort
- through the **Cell and Gene Therapy Catapult**, working with the UK government vaccine taskforce, a £100 million state-of-the-art manufacturing innovation centre in Braintree is being developed to accelerate vaccine production capacity in the UK as part of the national COVID-19 response. This facility will have the immediate impact of vaccine manufacture and, with the establishment of an **advanced therapies skills training network**, leave a long-lasting legacy ensuring that the UK has the best skills and expertise in cell and gene therapy and vaccine manufacture
- providing support through the **High Value Manufacturing Catapult**, we convened an industrial consortium from across the aerospace, automotive, motorsport and medical sectors to produce ventilator devices. The **VentilatorChallengeUK** consortium of over 5,000 volunteers established seven new large-scale manufacturing facilities in weeks at sites including the Catapult's own **Advanced Manufacturing Research Centre Cymru** in Broughton. The consortium produced 13,437 ventilators in only 12 weeks, more than doubling the number available to the NHS and building a resilient stock should ventilators be required in the future.



A selection of the institutes, laboratories, centres and units supported by our councils



Delivering Together

Through our research councils, Research England and Innovate UK, we fund and operate activities across the whole research and innovation landscape. Working together to deliver within specialisms and to shared priorities, we deliver our vision and mission by bringing together our in-depth knowledge and expertise. We work collaboratively to address pressing challenges, enhancing and maximising the impact we can have for our communities and wider society.

In the past year, we have responded to the challenges presented by COVID-19 by working together with our partners and communities. In response to the pandemic, we have reprioritised some of our activities for the year and we have continued to deliver against our wider priorities across the R&I landscape. The following sections highlight the contributions of our research councils, Research England and Innovate UK, reflecting what we have delivered against the commitments in our Corporate Plan.

Arts and Humanities Research Council



**Arts and
Humanities
Research Council**

AHRC sustains a questioning, curious and creative approach to research for everyone. We use this research to address contemporary challenges and we foster the creative presentation of research to reach the broadest possible audience, sparking new questions and ideas. The arts and humanities help reimagine the world and address the structural challenges which have become more visible due to the pandemic.



The Imperial War Museum exhibition **Refugees: Forced to Flee**, featuring funded research from the Economic and Social Research Council and AHRC, opened to the public in September 2020, greeting 60,000 visitors before the Museum was closed in November due to COVID-19.

During lockdown we continued working in partnership to make content available through initiatives such as the **Refugee Nights virtual festival**, which reached 9,400 viewers and explored the stories behind the headlines, celebrating the rich and important cultural contributions refugees make to UK public life.

Image credits – Getty Images

Over the past year we have continued to support:

Cultural and Creative Industries

Providing new investment to level up productivity, employment opportunities, economic growth and sustainable regeneration across the UK, we:

- worked with the Department for Digital, Culture, Media and Sport to conclude the **Boundless Creativity** review, providing recommendations on new ways in which culture can thrive in a digital age
- continued investing through our **Creative Industries Clusters Programme (CICP)**, which has attracted co-investment of £46 million. CICP's Policy and Evidence Centre has become a source of expertise and independent research, including on the impact of the pandemic on the cultural sector
- continued to build a **global partnership network**, with key partnerships in the US and China as well as Germany and Ireland. We have jointly supported 34 projects with US partners and launched eight 'Creative Partnerships' under the China Fund for International Collaboration programme. Funded work includes exploring the role of Artificial Intelligence in transforming research in cultural institutions, enhancing community engagement through digital tools and new models for creating and distributing fashion
- worked with UK-based partners to enhance research capacity through our **World Class Labs** investments to create innovative audience experiences and to promote mental health and wellbeing.

Cultural Assets

To support a culture of collaboration, boost the heritage economy and enhance public engagement, we:

- launched the first round of projects and began commissioning large-scale research activities, in our **Towards a National Collection (TaNC) programme**. Over the next five years, it will address barriers between different online museums' collections to create a unified, virtual 'national collection'. TaNC also funded proposals through our COVID-19 Agile call, supporting research on digital capacity and digital engagement with cultural assets during the lockdown.

Contemporary Challenges

To address systemic injustices, challenges to communities and foster exemplary interdisciplinary research:

- with the ESRC and the Medical Research Council (MRC) we participated in a major new programme of research on **adolescence, mental health and the developing mind** which focuses on the positive contribution that adolescents can make to culture and society
- we awarded three projects in the **Living with Climate Uncertainty** call as part of the UKRI Strategic Priorities Fund and Met Office programme on climate resilience, which will help in ensuring that the UK is resilient to climate variability and change

- we funded research to address the effects, mitigations and consequences of the pandemic, including the role of the creative and cultural sector and long-term ethical approaches to vaccination, through our **COVID-19 Agile call**

- we awarded 10 culture-changing **Equality, Diversity and Inclusion engagement fellowships**, worth £1 million in total, enabling arts and humanities researchers to further the impact of their research and work in equitable partnerships with communities.

Strategically driven processes

To support efficient and effective processes, we:

- introduced a **new internal training programme** which has led to an improved experience for grant applicants and award holders. The number of fellowship applications processed in time for their planned meeting has now increased from 49% in 2019 to 94% in 2020
- completed the initial internal engagement stage of exploring ways to **increase the diversity of our peer review college**.

Nearly 850,000 listeners tuned in to the **New Thinking podcasts** delivered as part of our public engagement partnership with the BBC. We also launched '**Animated Thinking**', a series of short films exploring some of the research we support. The series has received 120,000+ views on BBC iPlayer, Facebook and Twitter.

A new fund, **Capability for Collections**, is upgrading and refurbishing research facilities to enable more collections-based research. So far we have invested £25 million through 48 grant awards, which will improve access to and enable collaborative research on collections of all kinds across the UK.

Biotechnology and Biological Sciences Research Council



**Biotechnology and
Biological Sciences
Research Council**

Through BBSRC we invest in world-class bioscience research and training. This research is helping society to meet major challenges, including food security, green energy and healthier, longer lives, underpinning important UK economic sectors such as farming, food, industrial biotechnology and pharmaceuticals.

Building on our existing work in key areas of research such as virology, vaccinology and infectious disease, and investment in our funded institutes, we have supported the UK bioscience community response to the COVID-19 pandemic. We have convened partners across UKRI and government to develop plans for **greater coordination of research** in the areas of zoonotic disease, **strengthening the ability** of the UK to prevent and respond to future outbreaks.

Controlling zoonotic diseases

Zoonotic diseases are spread between animals and humans. Working in partnership, we **led the Zoonoses and Emerging Livestock Systems (ZELS)** programme which has shown how small changes in behaviour can help control zoonotic diseases. This multi-disciplinary programme brings together many different researchers and partners to understand, identify and develop effective disease control strategies and interventions.

Over the last year we have continued to support our priority areas:

Advancing the frontiers of bioscience discovery

To prioritise excellence in discovery research and breakthrough innovations for research and innovation, we:

- invested £145 million in creative, investigator-led discovery research through our **flagship Responsive Mode programme**, including £14 million awarded to four multidisciplinary research teams as part of our Strategic Longer and Larger grants scheme (sLoLa). This research aims to inform our foundational knowledge of biology to drive forward future discoveries
- invested £1.8 million in projects to support the **early-stage translation of BBSRC-funded research**, helping researchers to maximise the societal and economic benefits of their research
- published our **review of data-intensive bioscience**, providing a framework for BBSRC's future strategy in this area.

Furthering UK leadership in Transformative Technologies

To build on capabilities to date and grow the UK's global leadership in transformative technologies, we:

- invested £2.75 million in the next generation of cutting-edge research technologies through our **Tools and Resources Development Fund**. The co-funded call encouraged the development of transformative research technologies for the detection and diagnosis of plant and animal diseases

- invested over £20 million in the provision of advanced equipment for the UK research base, including £6 million to upgrade facilities at the UK's four **DNA Foundries** with the latest world-leading and innovative DNA synthesis systems.

Tackling major societal challenges

To harness the UK's world-leading bioscience expertise and tackle global threats to human and animal health, we:

- led a £24 million investment in interdisciplinary research aimed at **transforming the UK food system** by joining up healthy and accessible consumption with sustainable food production and supply
- supported the international multi-agency **Ecology and Evolution of Infectious Disease programme**, which will help to encourage multidisciplinary and collaborative international research to tackle infectious diseases of animals, humans and plants.

Working with key partners, we invested £13 million as part of the **Strategic Priorities Fund's, Bacterial Plant Pathogens programme** in research to counter infectious diseases of plants and trees that threaten crop production, forestry, commercial and amenity horticulture, woodlands and wider biodiversity.

Image credit – Drew Hays on Unsplash

Building strong foundations

To support people, infrastructures and collaborations, we:

- launched new doctoral training programmes, including **Collaborative Training Partnerships** which aim to build capacity across sectors and industries of the UK bioeconomy and which are addressing skills shortages and helping to integrate businesses of all sizes
- awarded a further £5 million through a new **Centre for Doctoral Training (CDT)** which will support 63 studentships and develop the next generation of food systems thinkers.



Partnered with Aberystwyth University we contributed £12 million towards the £40.5 million project to complete construction of **Aberystwyth Innovation and Enterprise Campus (AberInnovation)** - a new world-leading bioscience infrastructure which brings business and academia together to support low-carbon innovation in the food and drink, agri-tech, bioprocessing and biotechnology sectors.

Economic and Social Research Council



Through ESRC we are the UK's largest funder of economic, social, behavioural and human data science research. This research is at the forefront of addressing major national and global challenges, promoting a fair and sustainable economy, improving understanding of 21st-century society and informing public policy.

The value of social science has nowhere been more evident than in policy decisions around the recent pandemic. Over the year, we have developed a portfolio of nearly **200 COVID-19-related projects** which we will harness to address key policy questions, practitioner challenges and public concerns, including impacts of the pandemic on social groups and societal structures.

Over the last year, we have continued to support:

Economic and Social data and research to improve lives

Developing and investing in new programmes and partnerships:

- we invested a total of £42 million in the flagship **Productivity Institute** and other related investments with Innovate UK and the UK Government. The Productivity Institute will undertake groundbreaking research to explore how to increase productivity, boost wages and support the economic recovery across the UK
- with the Health Foundation, we supported the development of a new £15 million **Evidence Centre (IMPACT – Improving Adult Care Together)** that will lead the way for better implementation of high-quality research evidence in **adult social care**
- we invested £3.8 million in a second wave of our **Governance After Brexit** programme, supporting innovative and ambitious projects on issues such as trade, borders, migration and democracy to understand the long-term implications for governance after Brexit.

Data and Infrastructure

Maintaining the UK's world-class national data portfolio and supporting innovation in existing data and infrastructure:

- our flagship **Administrative Data Research UK (ADR UK)** programme is improving researcher accessibility to the UK's wealth of public sector data, by linking together data held by different parts of government and making it available. ADR UK has supported almost 1,000 projects and five UK government departments are now actively engaged

- we provided investment of over £1.5 million for the UK's world-leading **longitudinal studies**, to enable them to collect new data about the impact of the pandemic. We have committed £4 million to a new longitudinal study of the pandemic's impact on young people and are laying the foundations for future longitudinal research by commissioning a pilot of a new **early life cohort study** to track the lives of children born in the 2020s, one of UKRI's priority infrastructure investments.

Talent, methods and leadership

Building the skills social scientists need and extending support across researchers' entire careers, we:

- launched a **review of the structure of the UK social science PhD** in January 2020 to ensure that the skills and capabilities of social science graduates meet the needs of today's society and employers. This important work will continue throughout 2021 and will inform our support future cohorts of doctoral students.

Knowledge exchange and impact

Sustaining and advancing our world-leading status in the development of creative knowledge exchange and supporting collaboration, we:

- collaborated with the Government Office for Science to fund **Areas of Research Interest (ARI)** fellowships. This led to a set of reports that the Fellows published in February from their 'Rebuilding a Resilient Britain' programme, identifying topics and themes that will support the UK recovery from the pandemic.

International collaboration

With partner funding agencies in France, Germany, Canada and the Netherlands our **Open Research Area (ORA)** competition has established itself as a model of international collaboration. This year, via the sixth round of the ORA, we have invested in projects investigating demographic and socioeconomic change in 'left behind places', international police accountability standards and childhood prosocial development.

Connecting International Research to policy

We have established a £2 million COVID-19-focused **International Public Policy Observatory** to mobilise and assess evidence from around the world to inform policymakers on the social, economic and behavioural impacts of the pandemic.

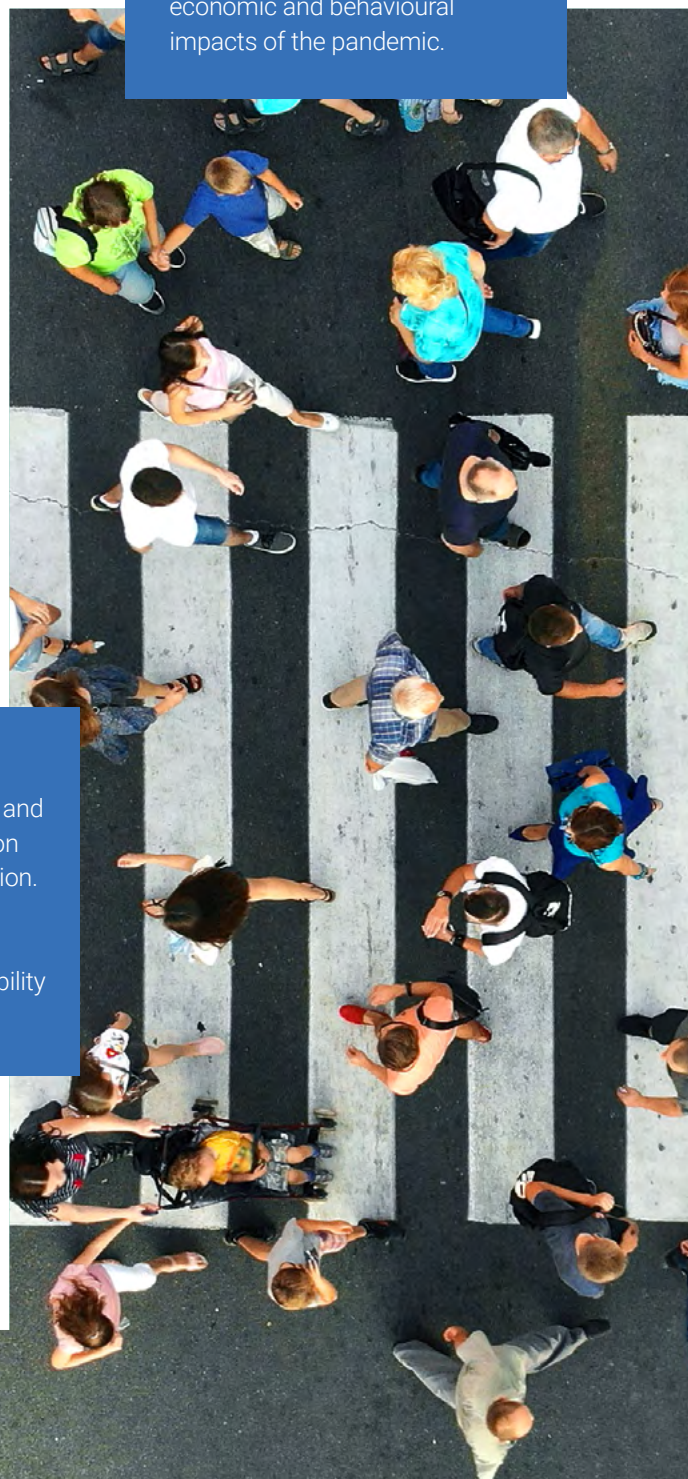


Image credit – Getty Images

Engineering and Physical Sciences Research Council



Engineering and Physical Sciences Research Council

Through EPSRC we invest in world-leading research and postgraduate training across the engineering and physical sciences. This research builds the knowledge and skills base needed to address scientific and technological challenges and provides a platform for future UK prosperity by contributing to a healthy, connected, resilient, productive nation.

Last year, we supported:



Over the last year we have continued to support our priority areas:

Delivering economic impact and social prosperity

To decrease the timescales between discovery research and impact, we:

- leveraged relationships with the academic community to respond to the pandemic. The COVID-19 Agile Call funded 43 new projects worth over £20 million and repurposed a further 13 existing projects. Funded work included developing alternative Personal Protective Equipment and breathing aids, and modelling to understanding virus transmission, treatments and preventative measures
- in collaboration with the Science and Technology Facilities Council (STFC), led the £102 million investment to establish the National Quantum Computing Centre (NQCC). The NQCC will enhance the UK's global leadership in quantum computing, allow it to translate its research strengths into innovation, and enable the creation of the first generation of quantum computers in the UK, helping to build a resilient future economy.

Realising the potential of engineering and physical sciences research

Supporting and drawing together people, expertise and facilities and promoting excellence across all our investments, we:

- funded adventurous high-risk transformative research in Mathematical Sciences and Physical Sciences. Through this **New Horizons call** we have allocated around £25.5 million to fund 126 projects this year

- launched and made the new **Open Fellowships scheme** more accessible. The scheme provides a longer-term, flexible model that complements and gives applicants the ability to build a Fellowship around their research and career needs
- continued to invest up to £20 million in **Prosperity Partnerships**, expanding the volume and sector coverage in the fourth round this year. Since its launch, the programme has leveraged £150 million from business and university partners, against an investment of £112 million.

- as Senior Responsible Officers for the **Rosalind Franklin Institute**, supported the **Harwell Science and Innovation Campus** towards a key construction milestone. The construction company Mace has now handed legal ownership to UKRI, with the next stage lined up for specialist scientific fit-out. The Rosalind Franklin Institute was launched by the UK Government in 2017 as a national institute designed to bring multiple companies and HEIs together; supporting world-leading research at the interface of physical sciences, engineering and life sciences.

Enabling the UK engineering and physical sciences landscape to deliver

Investing in the core foundations of the research base to ensure the UK remains globally competitive and accessing talent through equality, diversity and inclusion, we:

- improved participation of under-represented groups in our activities and continue to promote diversity within the research population
 - female Principal Investigators (PIs) now represent 18.2% of our portfolio in 2019-20, up from 15.0% in 2017-18, and the proportion of women on funding panels in 2019-20 is at 32%, exceeding our target of 30%
 - PIs who identify as ethnic minority have increased from 13.0% in 2017-18 to 15.3% in 2019-20. The proportion of panel members who identify as ethnic minority has also risen, from 9.7% in 2017-18 to 12.3% in 2019-20

Key Highlights include:

74.1%

of our research portfolio by value is multidisciplinary

We published a **statement of opportunities** for the UK following the UKRI review of artificial intelligence (AI)

We delivered the second phase of **Turing AI Fellowships**, investing

£20m

in 15 of the most promising AI researchers

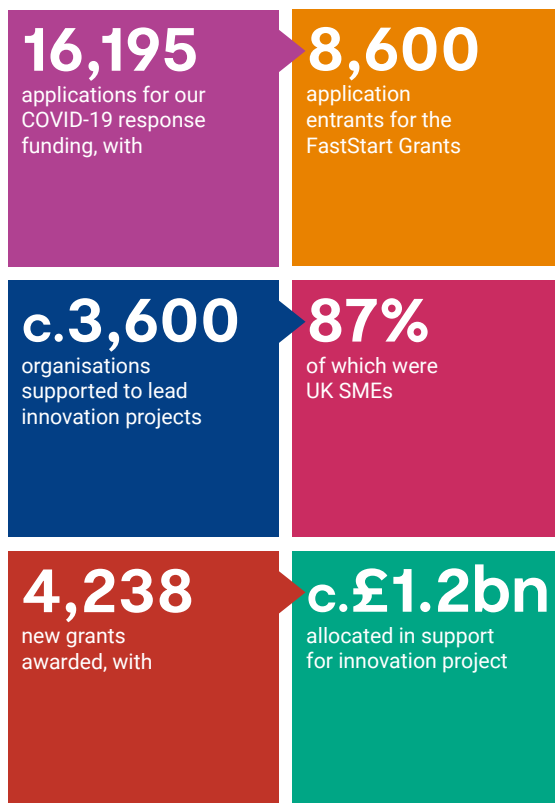
We have supported **The National Innovation Centre for Data (NICD)**, providing over £15 million in funding. The centre is focused on upskilling the UK workforce so that organisations can realise the opportunities to transform what they do through data science. AkzoNobel has worked with the **National Innovation Centre for Data** which has led to 12+ innovation projects being in development and one new digital product, which is predicted to create revenue opportunities of over £10 million annually.

Innovate UK



**Innovate
UK**

Through Innovate UK we drive productivity and economic growth by supporting businesses to develop and realise the potential of new ideas, including those from the UK's world-class research base. We connect businesses to partners, customers and investors that can help them turn these ideas into commercially successful products and services, and into business growth.



As a direct result of Innovate UK funding, **Arrival**, a UK maker of **electric, autonomous-ready vehicles**, has **grown from 525 employees in 2018 to over 1,000 globally in 2020**. In 2020, Arrival went on to secure a €100 million investment, resulting in achieving unicorn status and a further €400 million order for 10,000 vehicles from United Parcel Service (UPS) and recently, following a merger, listing on Nasdaq.

Over the last year:

Responding to COVID-19

Developing and implementing measures to help support innovative businesses through the coronavirus pandemic, we:

- invested an additional £710 million in **COVID-19 response funding** (over two years) to run 25 competitions, processing 16,000 applications and completing the assessment, approval, and setup of over 2,600 projects
- stabilised and supported existing projects through the pandemic with **Continuity Grants and Loans**, and £158 million in prepayments (grant or loan funding paid to businesses before service) to 2,779 new and existing awardees have been processed
- completed significant enhancements to our online funding system, the digital **Innovation Funding Service Post Award**, to enable adjustments, prepayments, and volumes being processed. We engaged with over 5,300 small and medium-sized enterprises to offer **Innovation Growth Advisory Support**, with 2,906 active support interventions focused on recovery, growth, and scale underway. We relaunched our growth and scaling service as **Innovate UK EDGE**, bringing our wider business innovation support under one umbrella. We have adapted this support in an agile way, including a 35% (c.70) increase in specialists on the ground, piloting new and expanded initiatives to help UK innovation-led companies survive, stabilise, and get back to growth by supporting recovery, renewal, and scaling of their business models.

Long-Term Strategy

Setting a clear vision for innovation in the UK, and setting out how Innovate UK will work with partners to ensure long-term, innovation-led economic recovery and growth:

- we have engaged partners and businesses on a long-term business innovation strategy to inform our future direction and feed into government thinking around the R&D Roadmap and Plan for Growth
- we have been developing a strategy for Innovation Talent and Skills, identifying our role in putting investment in people, talent and skills at the forefront of the Innovation ecosystem. We will take this forward working with the Department for Business, Energy and Industrial Strategy on the new Innovation Strategy, announced in the Plan for Growth
- in response to the disproportionate impact of COVID-19 on young people and women-led businesses in the UK and globally, and aligned to a significant increase in high-quality applications, we significantly boosted the budget and number of award winners for **Young Innovators** (from 32 to 64) and **Women in Innovation** (from 10 to 40).

Investing in people and ideas

Supporting and investing in innovative businesses and entrepreneurs, we:

- worked with several countries to deliver opportunities for UK businesses to collaborate on R&I. This has included our first funding competitions with the governments of Japan and Singapore, and the launch of our new **Global Incubator** with the US, supporting UK clean tech companies to explore future market growth there. **Our Scaling Out for Impact** programme

Supporting business-led innovation in response to COVID-19 global pandemic

Supported by our FastStart Programme, **Fernhay** were able to develop an updated COVID-19 safe emission-free eQuad delivery system, which has now been successfully trialled in Dublin and Paris and is in production and sales with customers such as UPS.

We also supported the **Open Kitchen**, helping them develop a portal for their system to allow coordination of food between restaurants, charities and food distributors to provide free meals to vulnerable people during the pandemic. They have produced over 3,000 restaurant-made meals, distributed across the UK.

connected and built complementary partnerships between ventures in UK and South Africa, harnessing collaboration to address critical challenges in rural and township communities in South Africa.

Enabling Impact

Maximising the impact of world-class knowledge, emerging technologies and high-growth potential sectors, we:

- supported early and late stage research and innovation through £110 million of Smart Grants funding, exceeding our target. We funded 499 companies and their 152 partners through 368 projects, the largest number of projects ever in the Smart Grants programme
- committed £12 million in the **Innovation to Commercialisation of University Research (ICURE)**, supporting 88 teams and seeing 28 new companies spin out
- invested £240 million in the **Catapult Network**, helping to underpin R&D activity in sectors affected by the pandemic, from high-value manufacturing to satellite applications, and enabled businesses to access the expertise and facilities needed to accelerate the economic recovery.

1,313

instances of new products, services and processes

4,681

FTE new jobs created

Data from Innovate UK Project Completion Forms, covering all projects which finished in 2020-21.

Medical Research Council



**Medical
Research
Council**

Through the MRC we aim to improve human health through world-class research and innovation. We will achieve this by addressing three objectives: investing in health focus themes, catalysing partnerships for health and economic impact, and supporting excellence.

Gene therapy innovation hubs launched

With LifeArc, and support from BBSRC, we have invested £18 million to create a national network of cutting-edge gene therapy innovation hubs.

This funding will support the creation of the three dedicated facilities to advance the clinical development of new genetic treatments by manufacturing clinical grade material for early stage academic clinical trials in the UK. It will have the potential to transform care for millions of patients including those with rare and life-threatening genetic diseases.

Over the last year we have continued:

Investing in health focus themes to address national and global health challenges

Supporting high-quality research to address the challenges of COVID-19, disease prevention and health inequalities and to accelerate the early detection of diseases:

- in partnership with the National Institute for Health Research (NIHR) we funded the late pre-clinical and early clinical studies (£2.6 million) of the Oxford/Astra Zeneca (AZ) COVID-19 vaccine, which is now being used as part of the largest vaccination programme in British history
- jointly with the Department of Health and Social Care/ NIHR, we are leading on a £20 million investment in the Tackling multimorbidity at scale programme, supporting interdisciplinary research that will advance our understanding of the determinants of multiple long-term conditions
- we have progressed the delivery of the £30 million Nucleic Acid Therapy Accelerator. Facilities have been identified and refurbished ahead of the launch of scientific programmes and a full Scientific Advisory Group is now active, with strong representation from international commercial leaders.

Catalysing partnerships for health and economic impact

Supporting researchers and institutions, maximising the impact of discovery science and supporting researcher collaboration with key science nations, we have:

- supported existing partnerships with industry and catalysed new opportunities by bringing together industry representatives and academics, including the renewal of the LMB-AZ Blue Sky collaboration fund which supports collaborative projects helping to improve our understanding of fundamental biology and disease
- worked with our international partners to develop and deliver collaborative activities in priority scientific areas, supporting 17 collaborative grants starting in 2020-21 with an investment of £9.9 million and matched investment by our funding partners, such as the Japan Agency for Medical Research and Development (Regenerative Medicine) and the US National Science Foundation (Next Generation Networks in Neuroscience)
- collaborated with the Indian Department of Biotechnology to address COVID-19 in South Asian populations in the UK and India, supporting four joint research awards with a total partnership investment of £5 million.

Supporting excellence

Supporting the best people, strengthening the research base, supporting access to new technologies and fostering collaboration, we:

- conducted a Strategic Review of MRC's Unit and Centre Portfolio, identifying areas where MRC strategic investment could make a transformational contribution to UK global leadership in biomedical research. Acting on its recommendations, 16 awards (£1.6 million)

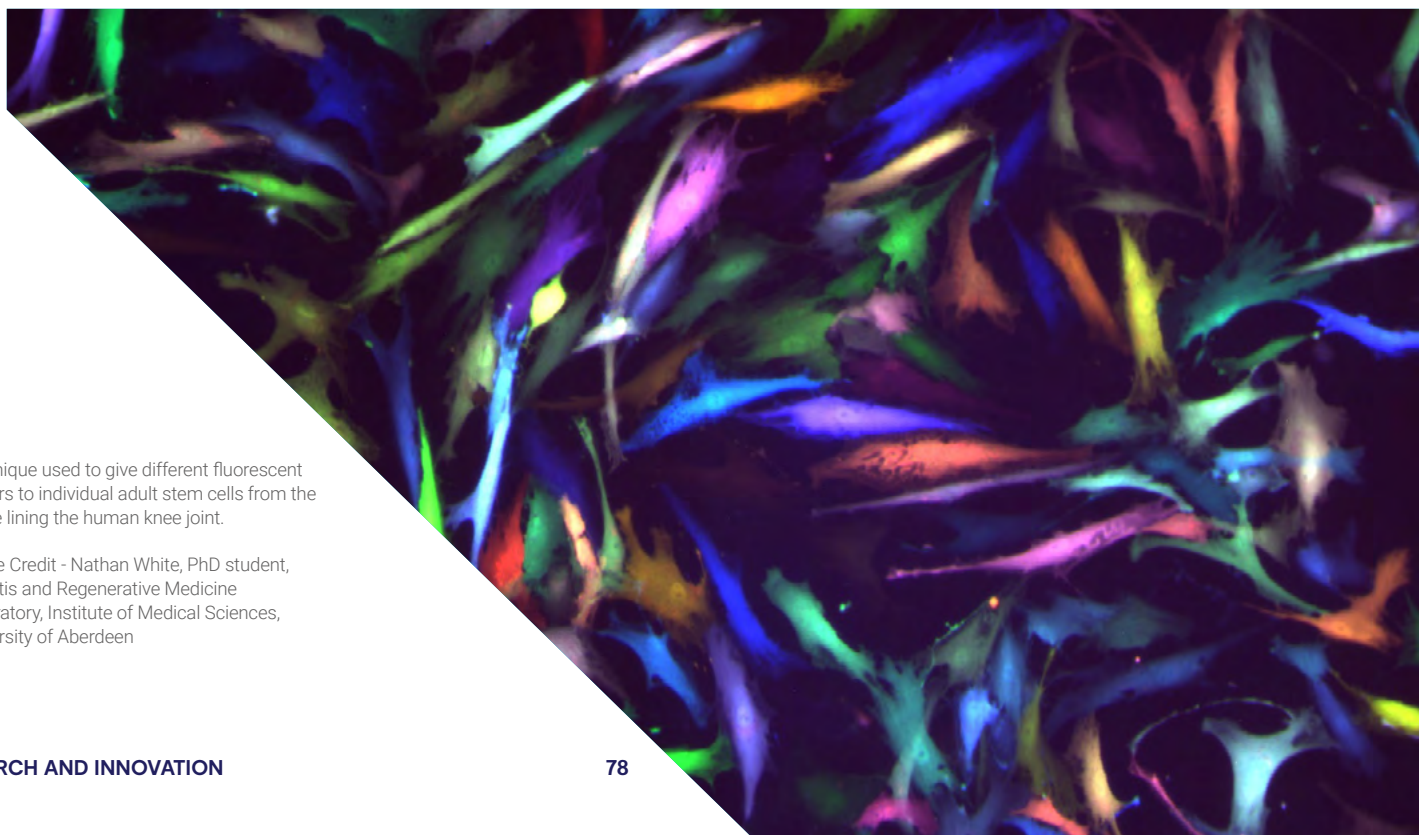
were made across our Unit portfolio to support the generation of national assets, and there is ongoing work to develop and implement novel investment models

- with our co-funding partner NIHR, we are establishing the **Clinical Academic Research Partnership (CARP)** scheme as a long-term funding opportunity. This will help to grow the number of active clinical researchers by providing a route for research-qualified healthcare professionals to increase their research skills and experience. To date we have invested £10 million across 45 awards
- launched the development phase of a major new network in mouse genetics for disease modelling, to accelerate our understanding of human disease and improve diagnosis and treatments.

Supporting Mental Health

With Health Data Research UK, we awarded £2 million to support a new Mental Health Data Research Hub which will bring together a broad range of data sources to reflect the multi-dimensional determinants of mental health enabling a precision medicine approach.

We have also allocated £1 million in Engagement Awards as part of the **Adolescence, Mental Health and the Developing Mind programme**, to foster multidisciplinary collaborations and establish networks between researchers and key stakeholders including in policy and practice, and young people to support research exploring preventative strategies and novel interventions.



Technique used to give different fluorescent colours to individual adult stem cells from the tissue lining the human knee joint.

Image Credit - Nathan White, PhD student, Arthritis and Regenerative Medicine Laboratory, Institute of Medical Sciences, University of Aberdeen

Natural Environment Research Council



Natural Environment Research Council

Through NERC we are the UK's leading investor in environmental science. Our world-class research, skills and infrastructure provide deep understanding of how systems are needed to solve major global issues such as the climate crisis and plastic pollution, and bring benefits to the UK and internationally, such as affordable clean energy, sustainable agriculture, clean air, and resilience.

We have supported research and engaged with the public to address and mitigate the impact of COVID-19 on the environment and society. Work funded through Bangor University led to a breakthrough discovery that coronavirus fragments in wastewater can reveal when and where a spike is happening in a local community. This is being used by NHS Test and Trace.



We are championing and supporting the government's ambition for clean growth and green recovery by leading on UKRI's Environmental Sustainability Strategy and on UKRI's COP26 activities to showcase UKRI-supported cutting-edge research and innovation to understand, tackle and mitigate the effects of climate change.

In the last year we have continued:

Environmental Solutions

Supporting researchers and the community to take a whole systems approach to complex problems:

- we launched the £20 million **Changing the Environment** initiative to create new interdisciplinary approaches and communities within Higher Education Institutions to deliver environmental solutions
- with Innovate UK we have invested in the **Climate and Environmental Risk Analytics for Resilient Finance (CERAF) programme**, which will support climate and environmental risk analytics capability in the UK
- we also allocated funding for a £10 million **UK Centre for Greening, Finance & Investment (CGFI)** established in December 2020. The centre will provide support and advice to lenders, investors and insurers, enabling them to make environmentally sustainable decisions, and support a greener global economy.

Healthy and Resilient Environment

Supporting research to advance understanding of environmental hazards, managing vulnerability, risk, and recovery in a changing world, we:

- opened the UK Geoenergy Observatory in December 2020, an underground laboratory that will give scientists an unprecedented look at the subsurface to help deliver clean energy. The data it will collect will help our understanding of this heat source and its potential as a sustainable way of heating homes and businesses in cities
- invested £2.4 million in two joint UK-US projects as part of the **Changing North Atlantic Ocean and its Impact**

on **Climate programme**. We have also committed a further £2.7 million to the joint UK-US **Overturning in the Subpolar North Atlantic Programme** (OSNAP array). These investments will help our understanding of the Subpolar North Atlantic which is important for decadal climate prediction

- awarded close to £9 million to the **Space Weather Instrumentation, Measurement, Modelling and Risk** programme projects that span radiation risk forecasts, aviation risk, and ground effects. This will help enhance the UK's ability to forecast space weather, and the supporting technologies needed
- collaborated with the Engineering and Physical Sciences Research Council (EPSRC) and the Arts and Humanities Research Council (AHRC) on our £18.7 million **UK Climate Resilience** programme. This has funded a diverse range of projects including with the Met Office. Currently, 46 projects have been funded to help build UK capacity for resilience to climate variability and change.

Global Infrastructure and Partnerships

Supporting capital infrastructure investments that enable a step change in UK science capability and support net zero ambitions:

- The **RRS Sir David Attenborough** was handed over to NERC and the British Antarctic Survey by shipbuilder Cammell Laird on 27 November 2020. The ship is expected to commence polar operations in late 2021 after a period of intensive mariner training, testing and trialling. One of the most advanced polar multidisciplinary research vessels in the world, it will support scientists researching the oceans, seafloor, ice and atmosphere and transform how ship-borne science is conducted in the polar regions.



Our science has helped equip government, business and wider society to tackle air pollution. This has resulted in benefits including

- **£1.2 billion:** The estimated annual benefits from actions on air pollution enabled by our science
- **15 million:** The number of hay fever sufferers in the UK helped by daily pollen forecasts
- **24 people:** Lives saved for every 10 days of heatwave thanks to more accurate smog forecasts



Research England



**Research
England**

Research England has responsibility for supporting the research and knowledge exchange activity of universities in England and is focused on creating and sustaining conditions for a healthy and dynamic research and knowledge exchange system. This works to complement similar systems across the devolved administrations, to ensure that system-wide approaches are identified and implemented across the UK.

In partnership with colleagues across UKRI, the higher education (HE) sector, funding bodies of the devolved administrations, the Office for Students (OfS) and government we have worked to ensure that world-class research and innovation activity continues throughout the HE sector despite the challenges of COVID-19. This has resulted in new funding incentives to protect valuable research and knowledge exchange activities from a range of losses, and to policy interventions offering the flexibility necessary to address the practical challenges faced by universities.

In the last year we have continued to:

Respond to COVID-19:

To help stabilise the higher education research and Knowledge Exchange (KE) system, we:

- in partnership with other UK funding bodies, responded to COVID-19 pressures by introducing an extension to the Research Excellence Framework (REF) 2021 timeline, allowing more time to assess the quality of research in UK higher education institutions. 157 universities have now submitted to the REF which includes around 185,000 research outputs submitted for expert panel assessment, and around 6,700 research impact case studies
- provided £100 million of Quality Related (QR) research funding to eligible universities aimed at addressing immediate pressures and allowing them time to make an informed response to the pandemic
- implemented three award packages to support the investment in world-class infrastructure, including:
 - £61 million was allocated by Research England and the higher education funding bodies of the devolved administrations, to enable universities to make existing research infrastructure COVID-19 safe
 - £12 million from the UK Research Partnership and Investment Fund (UKRPIF), to support the maintenance, refurbishment and improvement of eligible existing infrastructure
 - £12.5 million for English universities to address differences in regional research capacity.

- supported the National Centre for Universities and Business (NCUB) to establish a taskforce to provide evidence and insights on the university and business response to the pandemic and on how best to tackle key challenges as set out in the UK government's Research and Development Roadmap
- allowed English universities in receipt of Higher Education Innovation Funding (HEIF) to use it flexibly to meet the challenges of the pandemic to **deliver the necessary innovation support for businesses, communities and others**
- Awarded £338,000 in grant funding to **The Conversation** to support the Coronavirus Insights project; a project designed to increase coverage and accessibility to the general public of expertise found within academic institutions in relation to the pandemic. Between April 2020 and March 2021, over 600 Coronavirus Insight articles had been published with in excess of 35 million views.

With UKRI International, we delivered the Global Research Council's (GRC) conference on **Responsible Research Assessment (RRA)** in November 2020, which captured the perspectives of 45 international speakers and shared existing practices and approaches from funders internationally. **Over 1000** international delegates **registered** for the conference, and **over half actively participated** in discussions, to support **excellent research and enable a diverse and thriving research culture**.

Stimulating recovery and growth in parallel to our COVID-19 response

To continue to challenge universities to identify and respond to opportunities to evolve, we:

- launched a call investing £6 million with the OfS on a joint funding competition totalling £8 million to improve access to and participation in postgraduate research study (PGR) for Black, Asian and other Minority Ethnic students.

By working extensively with the sector in response to a ministerial commission we published results from the first Knowledge Exchange Framework (KEF) to help provide more information about the economic and societal benefits realised through universities' knowledge exchange activities. The data and associated narratives published make visible how universities carry out a range of activities across seven perspectives of KE and allow users to compare the performance of clusters of universities with similar characteristics.

Image credit – Getty Images

Science and Technology Facilities Council



Science and
Technology
Facilities Council

Through STFC we provide world-leading multi-disciplinary science. We support and deliver research that seeks to understand the Universe from the largest astronomical scales to the tiniest constituents of matter, and creates impact on a very tangible, human scale.

This year we made significant contributions towards UK COVID-19 efforts. Our jointly funded Diamond Light Source's research and facilities have accelerated the search for drugs to treat COVID-19. 15,000 existing drugs are being screened for effectiveness as a treatment.

STFC-supported research
publications on average:

had a field Weighted
Citation Impact (FWCI) of
2.0
twice the global average

4%
of STFC-funded
publications are also
among the top 1%
most cited publications
globally – four times
the global average

Recent analysis has shown that STFC-funded
laboratories and research grants led to:

41
spinouts (37 in the time
period 2005-2020)

63
equity investments
in these spin outs,
totalling £55 million

with an average of
4
spinouts per annum
since 2014

In the last year we have continued to deliver:

World-Class Research

Championing UK global leadership in research to understand the universe, its fundamental constituents and their interactions:

- grants totalling £14.7 million were awarded to the Cockcroft Institute and the John Adams Institute for research and development into particle accelerators that underpin a significant proportion of STFC's science and activities. Particle accelerator research and development goes beyond high-energy physics, finding use in areas such as treating contaminated water, advanced medical imaging and proton therapy
- work is underway to review the proposals submitted for the experimental particle physics grant awards. The £50 million grant will fund research into the fundamental interactions of sub-atomic particles, helping us to understand the nature of matter and how the universe works.

World-Class Multidisciplinary Facilities

Ensuring our National Laboratories and international facilities deliver world-leading science:

- the ISIS Neutron and Muon Source (ISIS) and the Central Laser Facility (CLF) have returned to effective, but slightly reduced, operations due to controls to prevent spread of COVID-19 on site
- at the Diamond Light Source, 90% of Industrial Users have run their experiments via remote access. Many academic users' experiments could not take place because of COVID-19 restrictions, but of those experiments that took place, 90% were also remote or mail-in.

World-Class Innovation

To be innovative across all our activities, developing advanced technologies and creating new business opportunities:

- our Digital Cluster Development Team is now in place and the Cluster Strategy has been discussed with key stakeholders. These activities will help in creating an ecosystem in digital technologies around **Sci-Tech Daresbury**, a National Science and Innovation Campus that is thriving and integrating world-class science and technology with ambitious and fast-growing businesses
- the Department for Business, Energy and Industrial Strategy has approved the next stage of Hartree, to establish a National Centre for Digital Innovation in the North-West. This will provide UK companies access to leading edge super-computing and AI technologies, which can help them develop new products and processes. As part of this, IBM is planning to set up its first research location in the UK (one of only three in Europe).

World-Class Skills

Utilising our National Laboratories and Science Programme to develop a pipeline of skilled engineers, technicians and scientists:

- the STFC Skills Factory's outline business case was approved in September 2020 and we are working to secure funding and develop a detailed implementation plan. The STFC Skills Factory aims to deliver on-the-job training for 300 new trainees each year, providing industrial experience, pathway to accreditation and apprenticeship qualifications, in preparation for varied R&D careers at SMEs across the UK.

The **Square Kilometre Array (SKA)** project is an international effort to build the world's largest radio telescope and help us to study the universe in more detail than ever before. UK involvement is managed through STFC, and the UK is home to the SKA headquarters.

In December 2020 the UK ratified the Treaty to establish the SKA Observatory (SKAO) Convention and in February 2021 the UK government signed an agreement to host the SKAO. This speaks to the UK's commitment and brings us one step closer to construction, which is expected to commence in mid-2021.

Storage ring sextupole magnets

Image credit – STFC



Sustainable Development Goals

Working in partnership nationally and internationally, the UK's research and innovation system has a crucial role to play in finding innovative solutions to global challenges.

Working in partnership nationally and internationally, the UK's research and innovation system has a crucial role to play in finding innovative solutions to global challenges. Some of the Sustainable Development Goals we have contributed towards include:



GOAL 3: Good Health and Well-being

In addition to our response to COVID-19, health and wellbeing remains a key priority area in the work UKRI funds and delivers. **Key projects include:**

- UK Prevention Research Partnership: working in partnership we will commit over £50 million to support research into the primary prevention of non-communicable diseases including the use of new technologies to deliver interventions and investigating strategies for reducing health inequalities.
- 'Long-COVID': working in partnership to fund four new research studies worth £18.5 million to better understand and address the longer-term COVID-19 effects on physical and mental health in the community.
- The Global Food Security Programme: funded through the Strategic Priorities Fund, the programme is an eight-year, £47.5 million strategic research programme focused on transforming the UK food system for healthy people and a healthy environment.



GOAL 9: Industry, Innovation and Infrastructure

UKRI is committed to supporting sustainability and our national goal of moving towards net-zero.

Key projects include:

- The Aerospace Technology Institute (ATI) programme: we have collaborated with the Department for Business, Energy and Industrial Strategy (BEIS) to provide an £84.6 million boost for green aviation technology into the aerospace industry.
- UK's world-class research infrastructure: we are investing £213 million to expand and upgrade existing research infrastructure in UK, which will provide researchers with advanced equipment, facilities and technology, and help maintain the UK's position as a leader in research and innovation.



GOAL 13: Climate Action

UKRI recognises that climate change, and its impact, is a national and global priority. **Key projects include:**

- The UN Climate Change Conference (COP26): we are working closely with government and will showcase some of the UKRI-funded cutting-edge research and innovation that will help to understand, tackle and mitigate the effects of climate change.
- UK Climate Resilience programme: we have supported this £18.7 million programme which aims to draw together fragmented climate research and expertise to deliver robust, multi and interdisciplinary climate risk and adaptation solutions research.
- Subpolar North Atlantic: we have funded two new projects with the US National Science Foundation (NSF). These will provide evidence and knowledge which are important for decadal climate prediction and policy.



GOAL 17: Partnerships For The Goals

UKRI works with partners, across the UK and internationally, convening, catalysing and building novel partnerships. **Key projects include:**

- The African Research Leader Scheme: a joint award funded by the Medical Research Council (MRC) and the Foreign, Commonwealth & Development Office (FCDO), which aims to strengthen research leadership on key global health issues across sub-Saharan Africa.
- The Global Partnerships Seedcorn Fund: we have continued to award funding to the Global Partnerships Seedcorn Fund, which supports UK researchers to forge new partnerships and networks with the best international researchers in environmental science.

How we know if we are successful

Our transparency and accountability

We published our first Corporate Plan in September 2020, which set out our new vision and mission, and our planned deliverables for the 2020-21 financial year. It also included our plans to develop a new performance and impact management framework that will enable us to judge our success against delivering our vision robustly and transparently, and to manage our performance to maximise our impact and to deliver robust accountability.

Our performance and impact management framework

Reviewing and managing our performance is challenging for several reasons: the outcomes and impacts of the research and innovation we support take time to occur; and when they do, they are difficult to attribute reliably to specific interventions; and they are diverse, novel and unpredictable. Through the framework we must consider not just our inputs and activities but also the outputs, outcomes and wider impacts we enable.

For 2021-22 onwards we aim to pilot the use of a comprehensive performance and impact framework that will allow us to make nuanced, holistic and well-informed judgements of our performance, and put in place a process that enables us to report regularly against it. This will inform our decisions on planning, prioritisation and the continuous improvement of our activities. It will provide performance evidence to support annual objective setting and the development of our organisational strategy. It will also enable us to demonstrate our impact to our stakeholders.

Throughout 2020-21 we have developed an approach to gathering and presenting evidence to support the framework, in the form of a balanced scorecard.

| | | |
|---|--|---|
| What do we achieve for our stakeholders | OUTCOMES & IMPACTS | 1a: Improving understanding of ourselves and the world around us 1b: Improving lives and increasing prosperity 1c: Addressing industrial and societal challenges (including COVID-19) |
| How our stakeholders experience us | OUR COMMUNITIES & PARTNERS | 2a: Being a trusted steward and champion of the R&I system 2b: Supporting and developing a strong, diverse and inclusive R&I culture and environment 2c: Shaping an R&I system that gives everyone the opportunity to engage, contribute and to benefit |
| What we must excel at | OUR ORGANISATIONAL STRUCTURES & PROCESSES | 3a: Identifying, incentivising and supporting people and their ideas across the UK 3b: Convening and catalysing ground-breaking R&I on a national and international scale 3c: Investing in and conducting R&I responsibly and effectively |
| How can we learn & create value | OUR RESOURCES, LEARNING & GROWTH | 4a: Increasing the efficiency of our processes 4b: Becoming a more evidence-based organisation 4c: Attracting, supporting and empowering our staff |

The Balanced Scorecard

A balanced scorecard is a management system that enables us to consider strategic measures in addition to financial measures, to deliver a more 'balanced' view of performance and translate this into action. The aim is to avoid focusing on short-term measures and enable the organisation to focus efforts on delivering our vision and understanding the links between different elements of our business.

We have developed our balanced scorecard to measure performance against four perspectives:

- Outcomes and Impacts (what we achieve for our stakeholders)
- Our Communities and Partners (how our stakeholders experience us)
- Our Organisational Structures and Processes (what we must excel at)
- Our Resources, Learning and Growth (how we can learn and create value)

These four perspectives, together with our performance objectives, are designed to cover the whole of the organisation's activities both internally and externally, current and future.

Progress this year

In developing the balanced scorecard, we are drawing extensively on expertise internally and externally, considering each performance objective in detail to identify the key outcomes that are critical to the success of UKRI and the wider research and innovation system. We have identified the processes that lead to these outcomes, measures that could be used to provide evidence on the performance of these processes, and the data and measurements available. We are conscious of the need to avoid creating unnecessary reporting requirements and incentivising the wrong behaviours.

Developing the balanced scorecard will be an ongoing and continuous improvement activity, as we both improve the content of the scorecard and build our learning and evidence gathering capabilities. Importantly, we need to ensure that the scorecard is built around the things we value and wish to achieve and wish others to recognise that we value. It also needs to:

- provide a robust evidence base for us to manage the organisation
- provide assurance to our sponsors in the Department for Business, Energy and Industrial Strategy (BEIS) that we are adding value and managing ourselves as an organisation in an appropriate manner
- recognise UKRI's place within the wider research and innovation system
- incentivise the behaviours we would wish to see within the system
- capture internal and operational measures as well as demonstrating impact from our investments.

Our progress throughout 2020-21 has focused on identifying a pragmatic set of initial measures to be piloted through 2021-22.



Being a Responsible Organisation

Modern Slavery

UKRI is committed to the principles of the Modern Slavery Act 2015 and the abolition of modern slavery and human trafficking.

The Operational Governance Team is responsible for leading UKRI's modern slavery agenda and engages with stakeholders across the organisation to identify, monitor and manage risk in this area.



Image credit – Getty Images

UKRI seeks to eliminate the risk of modern slavery and human trafficking in its operations through a control framework which focuses on recruitment, selection and resource management, commercial supply chain arrangements, policy development for safeguarding and reporting of concerns, and employee awareness training.

UKRI has committed £10 million over five years to fund the Policy and Evidence Centre for Modern Slavery and Human Rights.

During 2020-21 UKRI has committed to undertake activities that include additional targeted awareness training; monitoring employee grievance mechanisms for association with modern slavery and human trafficking; procurement activities and risk assessments; and responding to legislative changes in response to the global pandemic and leaving the European Union.

The [UKRI Modern Slavery and Human Trafficking Statement for 2019-20](#) was published in December 2020.

Whistleblowing

UKRI will not condone any form of malpractice in the workplace and is committed to creating a safe, fair and honest working environment. The UKRI **Whistleblowing - Freedom To Speak Up Policy** and processes encourage and enable employees to speak out when they encounter or suspect malpractice. No one who raises a genuine concern about malpractice will be at risk of losing their job or suffering any form of retribution or detriment as a result of doing this. In addition to an external whistleblowing hotline, ARAPC Chair, Fiona Driscoll, has continued in her role as Freedom to Speak Up Guardian.

Through the UKRI Whistleblowing inbox, six concerns were submitted in 2020-21. Of those, in line with the Standard Operating Procedure (SOP) for undertaking a whistleblowing investigation, two were assessed within scope of the [UKRI Whistleblowing 'Freedom to Speak up' Policy](#) as a 'qualifying disclosure' about alleged or actual malpractice.

Achievements to date:

- review of UKRI whistleblowing internal processes and development of a Standard Operating Procedure for undertaking a whistleblowing investigation. This outlines the triage process, and applies standard case proformas to reviewing concerns and template letters. By having a clear process, we have mitigated the risk of concerns potentially falling through the gaps and improved the consistency of our investigation strategy;
- as part of this, we also developed a communication strategy to enable key stakeholders to be briefed at the right time in the investigation process whilst maintaining confidentiality; and
- we have expanded our internal investigation capacity and capability by organising specialist investigator training for a cohort of UKRI staff with an external training provider.

Complaints

As a public body, it is important that we have mechanisms to receive feedback; complaints provide an audit trail and can be an early warning of failures and where improvement is needed in service delivery. UKRI recognises that when complaints are handled well, they provide an opportunity for us to improve our service and reputation.

In the 2020-21 financial year we received 205 formal complaints. UKRI continues to review learnings and provide assurance that actions arising from the complaints are collated and evidenced on completion.

Achievements to date include:

- a review of our complaints process and subsequent internal process development, including user guidance and a toolkit of templates aligned to best practice;
- implementation of an electronic case management system (eCase) for complaints and inquiries;
- investment in developing our internal investigation skills by delivering complaints training sessions as part of the process roll-out;
- improved thematic reporting of complaints including to key groups such as the Equality, Diversity and Inclusion (EDI) Programme Board and Funding Assurance; and
- establishment of a quarterly Complaints Forum with membership made up of Council Complaint leads to share learning and update on process changes.

Conflicts of Interest

UKRI recognises the important role of ensuring transparency and compliance with [The Seven Principles of Public Life](#). UKRI staff are expected to comply with the highest standards of professional and ethical practice and are required to declare any interests which may conflict, or may be perceived to conflict, with UKRI's business. The current [UKRI Conflicts of Interest policy](#) is underpinned by the [UKRI Code of Conduct](#), which applies to all UKRI employees.

Declaring interests supports transparency and demonstrates the integrity of the UKRI's business and employees by providing assurance that any potential conflicts are considered and managed effectively. The current policy also requires senior leaders to declare any interests that could be (or be perceived as) a conflict in any discussions, decisions or actions that could risk the impression that UKRI has acted improperly. These registers are updated annually or when an individual requires an amendment to be made to their details. The UKRI Senior leadership team, Council, Board and Executive Committee member declarations are published annually on [ukri.org](#).

Achievements to date include:

- a review of the [UKRI Conflicts of Interest policy](#) with plans to transition to an overarching Declaration of Interest Policy;
- introduction of enhanced policy guidance with Frequently Asked Questions to support policy review; and
- development of a centralised self-service register that records and displays declared interests.

Gifts and Hospitality

As a major funding organisation, we are aware that accepting or giving gifts or hospitality may affect how we are perceived, and may be seen to affect our decision-making and behaviour. The purpose of our Gifts and Hospitality Policy is to ensure that all staff are aware of their responsibilities and are vigilant in ensuring that we remain impartial and fair across the work we do.

The cost of gifts and hospitality offered by UKRI must be proportionate, approved beforehand and recorded on our Gifts and Hospitality Register. All offers of gifts or hospitality made to staff must be declared even if not accepted and it is not standard for staff to accept gifts and hospitality. In line with the policy, gifts above £20 in value are surrendered.

Achievements to date include:

- publication of a new gifts and hospitality policy following extensive consultation and review;
- introduction of enhanced policy guidance with frequently asked questions; and
- deployment of a centralised self-service register that records and displays declared gifts and hospitality.

Environmental Sustainability Report

UKRI approach to environmental sustainability

In April 2020 UKRI published its Environmental Sustainability Strategy, with the commitment to adopt a leading position on environmental sustainability. We have ambitious goals to deliver net-zero greenhouse gas emissions from UKRI operations alongside wider positive environmental impacts by 2040, and to use our influence to drive positive environmental change within the research and innovation sector. The strategy sets out over 50 objectives across the next five years in the areas of carbon, procurement, resources, protecting and fostering a healthy environment, adapting to climate change, and engagement and decision making to embed sustainability in everything we do.

During the first year of delivery we have established and recruited a new environmental sustainability team, convened an Environmental Sustainability Forum with representatives from across the organisation, and formed thematic delivery groups to co-ordinate and drive the implementation of our strategy. We have formed an external advisory group to provide best practice advice and challenge on delivering our ambitions and targets. We have engaged our staff with the new strategy and begun a programme of providing sustainability guidance, starting with how to consider the environment when working from home. All councils in UKRI have produced action plans detailing how they will deliver the strategic objectives. This year, for the first time, we have worked to unify environmental data and reporting across UKRI and have established the baseline against which we will measure our progress going forward. Baseline data on our carbon emissions has formed the basis for developing a provisional pathway for achieving our 2040 net zero target.

For the purposes of this Annual Report we have reported our environmental sustainability performance in 2020-21 against HM Treasury Sustainability Reporting Guidance. We have provided case studies of the sustainability impacts of the research we fund along with qualitative examples of the operational changes we are making in line with our strategy. Our quantitative data is provided in the context of the Greening Government Commitments (GGC) and provides a somewhat anomalous picture for 2020-21, given the impact of the global pandemic on our operations and therefore on our environmental impacts.

UN Sustainable Development Goals

UKRI supports the UK contribution to the UN Sustainable Development Goals (SDGs) – both through the impact of our research and innovation, and by the way we conduct our activities and manage our funding services. Specific contributions to the goals in 2020-21 are highlighted throughout this section via icons.

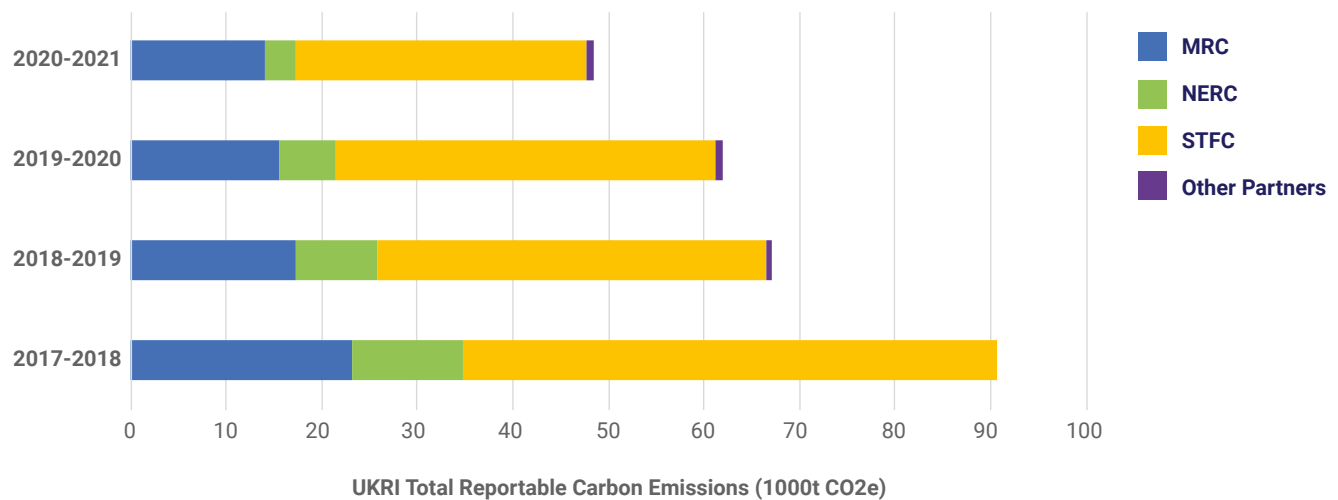
UKRI environmental performance quantitative reporting areas

Scope of UKRI reporting

Reported data is defined by HM Government's Greening Government Commitments (GGC). The data set includes direct (scope 1) and indirect (scope 2) greenhouse gas emissions from UK operations and business-related travel (scope 3) for the four-year reporting period 2017-18 to 2020-21. The 2017-18 data is for the MRC, STFC and NERC reportable estate. The 2018-19, 2019-20 and 2020-21 data is for the reportable estate owned by all UKRI councils.

UKRI carbon emissions

UKRI Total Reportable Carbon Emissions



UKRI carbon emissions from the UK estate fell by 21.7% in 2020-21 versus 2019-20, primarily as a result of the impacts of the COVID-19 pandemic on business operations.

UKRI greenhouse gas emissions

| UKRI greenhouse gas emissions | | 2017-18 | 2018-19 | 2019-20 | 2020-21 | |
|---|--|--------------------|---------|---------|---------|------|
| Non-financial total gross indicators (1000t CO2e) | Total gross emissions | 90.6 | 67.1 | 61.9 | 48.5 | |
| | Total net emissions | 90.6 | 67.1 | 61.9 | 48.5 | |
| | Gross emissions Scope 1 (direct) | Gas & LPG | 14.1 | 12.4 | 12.3 | 10.9 |
| | | Owned transport | 0.2 | 0.1 | 0.1 | 0.03 |
| | | Fugitive emissions | 1.7 | 1.7 | 1.5 | 0.02 |
| | Gross emissions Scope 2 & 3 (indirect) | Electricity | 72.8 | 51.5 | 47.1 | 37.4 |
| | | Heat | 0.03 | 0.02 | 0.004 | 0.00 |
| Business travel | | 1.8 | 1.2 | 0.8 | 0.05 | |
| Related energy consumption (million kWh) | Electricity: non renewable | 165.3 | 167.7 | 158.4 | 6.93 | |
| | Electricity: renewable | 0.2 | 0.3 | 11.8 | 127.9* | |
| | Gas | 69.9 | 67.6 | 66.8 | 59.7 | |
| | LPG | 0.06 | 0.01 | 0.07 | 0.00 | |
| | Heat | 0.2 | 0.1 | 1.0 | 6.4** | |
| | Other | 0.3 | 0.0 | 0.01 | 0.4 | |
| Financial indicators (£m) | Expenditure on energy | 17.6 | 23.4 | 25.1 | 21.7 | |
| | CRC Expenditure | 1.4 | 0.0 | 0.0 | 0.0 | |
| | Expenditure on accredited offsets | 0.0 | 0.0 | 0.0 | 0.0 | |
| | Expenditure on business travel | 5.2 | 4.5 | 3.86 | 0.53 | |

Notes on data

UKRI received confirmation from the Environment Agency that following its formation MRC, STFC and NERC did not have to participate in the final year (2018-19) of the Carbon Reduction Commitment (CRC) Energy Efficiency scheme. Business travel for 2017-18 and 2018-19 is for STFC, NERC and MRC only. Business travel for 2019-20 and 2020-21 is for all of UKRI. Business travel is reported for UK travel only.

* NERC moved to renewable electricity tariffs in 2019-20. The remainder of the UKRI estate transitioned to renewable electricity tariffs during 2020-21.

** From onsite ground source heat pumps and combined heat and power generation.

UKRI waste generation

| UKRI waste generation | | | 2017-18 | 2018-19 | 2019-20 | 2020-21 |
|---|---------------------|-------------------------------------|---------|---------|---------|---------|
| Non-financial total gross indicators (tonnes) | Total waste | | 2021.8 | 2077.0 | 1492.6 | 1109.2 |
| | Hazardous Waste | Total | 291.7 | 287.4 | 288.0 | 169.0 |
| | | Landfill | 110.6 | 110.8 | 66.0 | 47.0 |
| | Non-hazardous waste | Reused/ recycled Inc. composting | 1372.0 | 1227.3 | 779.5 | 487.0 |
| | | Incinerated with energy recovery | 247.6 | 445.5 | 359.1 | 341.0 |
| | | Incinerated without energy recovery | 0.0 | 0.0 | 0.0 | 0.2 |
| Financial indicators (£m) | Total disposal cost | | 0.8 | 0.8 | 0.9 | 0.9 |
| | Hazardous Waste | | 0.3 | 0.3 | 0.4 | 0.8 |
| | Non-hazardous waste | Landfill | 0.06 | 0.03 | 0.3 | 0.02 |
| | | Reused/ recycled/ composted | 0.3 | 0.2 | 0.2 | 0.1 |
| | | Incinerated with energy recovery | 0.2 | 0.2 | 0.2 | 0.01 |
| | | Incinerated without energy recovery | 0.0 | 0.0 | 0.0 | 0.0 |

Notes on data

All waste sent for incineration is with energy recovery, except for a small amount from a new waste stream arising and processed late in 2020-21. The cost was incurred in financial year 2021-22, so its financial value has not been reported.

UKRI water consumption

| UKRI water consumption | | | 2017-18 | 2018-19 | 2019-20 | 2020-21 |
|--|---------------------------------------|------------|---------|---------|---------|---------|
| Non-financial total gross indicators (000 m ³) | Total water consumption | | 272.2 | 281.8 | 299.8 | 216.4 |
| | Water consumption (office estate) | Supplied | 105.8 | 99.5 | 132.6 | 64.0 |
| | | Abstracted | 0.0 | 0.0 | 0.0 | 0.0 |
| | Water consumption (non-office estate) | Supplied | 183.0 | 176.7 | 167.2 | 152.4 |
| | | Abstracted | 0.0 | 0.0 | 0.0 | 0.0 |
| Financial indicators (£m) | Total cost | | 0.58 | 0.82 | 0.85 | 0.56 |
| | Water supply cost (office estate) | | 0.19 | 0.25 | 0.42 | 0.02 |
| | Water supply cost (non-office estate) | | 0.39 | 0.57 | 0.43 | 0.54 |

Notes on data

For 2020-21, water consumption for office estate is for Polaris House, which was closed for the majority of the year due to COVID-19. Water consumption for non-office estate is for NERC, MRC and STFC estates. No water is abstracted for consumption across the whole UKRI estate. Water costs include costs of any associated licences.



Image credit – Getty Images



UKRI environmental performance qualitative reporting areas

Waste management

UKRI is striving to reduce its total waste generation and increase waste recovery across all its operations. In the past year we have established our waste baseline, for 2017-18, against which we will be setting ourselves quantifiable targets to reduce the environmental impacts of our waste generation in line with GGC targets. Council Action Plans set out how waste will be tackled across our sites, some of which involve specialist waste streams generated by science facilities and laboratories. In addition to improving waste management in our own operations, UKRI funding has supported research and innovation to eliminate, reduce, reuse and recycle waste in a range of industries with some examples shown below.

- NERC’s British Geological Survey (BGS) Environmental Sustainability Strategy includes a number of waste management improvements across its Keyworth site. Additional waste streams have been established to not only reduce the amount that goes to landfill but also reduce the quantity of generated waste. Waste management within the laboratories has improved under the LEAF (Laboratory Efficiency Assessment Framework) initiative. This has enabled behavioural change amongst staff and helped reduce laboratory waste. **9 12**
- Knowledge acquired through sustained EPSRC funding has led to a new technology to tackle plastics currently considered unrecyclable, turning them into a valuable hydrocarbon product called Plaxx®, a feedstock which can be used to manufacture new plastic. **9 12**
- Small and medium-sized enterprises (SMEs) in Creative Industries Clusters supported by the Industrial Strategy Challenge Fund (ISCF) through AHRC are producing novel solutions to eliminate and repurpose waste materials in the fashion industry. Projects include developing a prototype foundry to break down and repurpose mixed metal components sourced from landfill, and advancing the potential of an established natural textile, Pinatex, made from pineapple leaf fibre, which is currently a by-product of existing agricultural processes. **9 12**

Consumption of finite materials

As UKRI moves towards more sustainable ways of conducting our work we are reducing our consumption of finite materials through better data, procurement and operations. For example, we have established our baseline for water consumption and are using that to conduct audits, identify opportunities for reduction, and set ourselves quantifiable reduction targets out to 2030. As well as looking at resource consumption on our own sites, our funded research is improving understanding of, and finding solutions to, consumption across society.

- NERC has carried out a water management audit across its UK estate to reduce its impact on the environment and find ways to minimise use of this increasingly precious resource. The audit analysed current performance against industry benchmarks and provided costed recommendations following site surveys that highlighted ways to reduce consumption. The

water management audit provided crucial management information that has informed where to focus water reduction works over the coming year. **6 13**

- The John Innes Centre has been funded by BBSRC through the World Class Labs scheme to carry out sustainability improvements to its buildings. Improvements include the installation of new growth cabinets that have reduced energy consumption by two thirds, rainwater harvesting that is reducing water consumption by at least 10%, and new waste-water treatment and recirculation processes that have reduced water consumption by a further 60%. **6 7 9**
- In November 2020, the UKRI Strategic Priorities Fund established five interdisciplinary circular economy centres. The project is led by EPSRC in collaboration with AHRC, BBSRC, ESRC, NERC, Innovate UK, and DEFRA. They will explore how the UK can move towards a circular economy by reusing waste materials in the textiles, construction, chemical and metal industries. This will lower the environmental impact of production and consumption and create opportunities for new UK industries. **9 12**

Low emission vehicles

UKRI operates around 100 vehicles, including some specialist vehicles to support our science operations. We are in the process of upgrading our fleet and associated infrastructure in order to meet the Government Fleet Commitment targets for 25% of vehicles being ultra-low emission (50gCO2/km) by 2022 and all vehicles being zero emissions by 2027. Post-lockdown we will be writing travel plans for all our sites, which will support the transition to low emission vehicles. In 2020-21 we installed 11 new electric vehicle charging points for staff and visitors, bringing the total across our estate to 40. Beyond our own operations, the research and innovation we support is helping to move the automotive sector towards lower carbon alternatives globally.

- STFC recently replaced its diesel-powered estates transport fleet with electric vehicles, eliminating tailpipe carbon emissions and improving air quality. These new 7-seater vehicles have a 211-mile range and repositionable seats for multiple layouts and load space. **12 13**

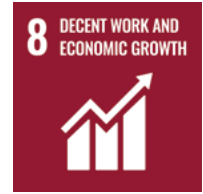


- Due to home working during COVID-19 there has been a consistent need to distribute office equipment to individuals' homes. The Polaris House Estates Team has delivered equipment to those living within a 50-mile radius of Polaris House. Utilising hybrid vehicles and strategic planning of routes and delivery schedules has enabled deliveries to be made with reduced environmental impact when compared to traditional delivery methods. Delivering in this way also reduced packaging as there was limited need to protect equipment, and recycled packaging materials were used where required. **8 12**
- Grant funding from the ISCF Faraday battery challenge from Innovate UK has helped develop next-generation lithium-sulphur (Li-S) battery technology that could replace diesel fuel across the globe, cutting pollution from buses and trucks. Li-S is lighter and safer than lithium-ion, and maintenance-free. For every 1,000 diesel buses in the transportation system that Li-S batteries replace, 500 barrels of oil a day could be eliminated. **3 9 11**

Biodiversity

Protection of biodiversity is a key component of the UKRI Environmental Sustainability Strategy. We will be conducting biodiversity assessments of our estate in the coming year, which will form the basis of site-specific Biodiversity Action Plans to make ongoing improvements. With biodiversity under threat globally, UKRI funded research and innovation is helping to understand and promote biodiversity along with the environmental, economic and wellbeing benefits it brings. Specific examples of our contribution to biodiversity are provided below.

- NERC's BGS Keyworth has now converted 70% of its lawn area to wildflower meadow, and there are over 400 Bee Orchids growing onsite this year. This has required a step change in perceptions of what a professional site should look like. **11 15**





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Ecologists at the NERC-funded UK Centre for Ecology & Hydrology (UKCEH) have launched a Biodiversity Toolkit to enable housing providers and residents to support wildlife on their estates. The collaboratively developed toolkit provides a range of options for improving biodiversity that can be tailored according to housing density and budget. Connecting and interacting with nature has been shown to be important for people’s physical and mental health and this has been brought to the fore during the COVID-19 lockdowns. **3 11 15**



COVID-19 has presented challenges in meeting pollination needs for fruit trees and many other crops. Imports of bees from Southern Europe and programmes to monitor wild pollinators, which mostly rely on volunteer surveillance, were both put on hold during lockdown. In order to reduce reliance on imported bees and support more resilient crop production, the PollenNet project, funded by Innovate UK’s Sustainable Innovation Fund, is piloting an innovative new device for low-cost automated monitoring of pollinator abundance on fruit crops. **2 15**



Sustainable procurement

UKRI’s Environmental Sustainability Strategy commits us to a range of objectives on sustainable procurement, including setting supplier expectations and staff guidelines. We will also embed greater consideration for sustainability into contract management procedures over the next two years. Activity this year has included sustainable procurement training, and commissioning research to understand the environmental impact of the goods and services we purchase.



In February 2021, the UKRI Environmental Sustainability Team worked with an external training provider to create a tailored sustainable procurement (ISO20400) training course. The course provided employees with useful tools and guidance to embed sustainable procurement activities and policies across the organisation. **4 8 12**



The Technology Department at STFC has provided all staff with two reusable facemasks to use as they return to work on site. Washing the masks at home and reusing them has avoided an estimated 7,000 disposable masks going to landfill. **3 12**



UKRI centres and institutes arrange their own catering contracts. At UKRI’s Head Office, Polaris House in Swindon, catering services are provided by Aramark. Whilst the Aramark’s catering facilities have been closed during lockdown, during normal times they undertake a range of sustainability initiatives in their sourcing of goods and waste management.



The Polaris House Estates Team have designed and purchased a new wayfinding system to introduce new signage throughout the estate. The system was created to minimise waste and use ethical products and is designed to allow for re-use and re-purposing wherever possible. All internal ‘hard’ signage is recyclable and made from recycled acrylic, and the signs are produced on site to reduce transport miles. **12**



- UKRI's policy is to comply with the Prompt Payment Code for the payment of invoices for goods and services. Whilst our standard terms and conditions specify payment within 30 days of receipt, we aim to make payments within five working days. In 2020-21, UKRI paid 97% of undisputed invoices within 30 days (2019-20: 97%) and 69% within five working days (2019-20: 69%).

Sustainable construction

Pioneering more sustainable forms of construction is a key theme in UKRI's Industrial Strategy Challenge Fund, as well as other areas of UKRI funding. In addition to supporting innovation in this sector, UKRI is undertaking work to reduce the environmental impact of its own new and existing buildings. From 2020 environmental impacts have been included in the assessment of proposals for new UKRI investment in research infrastructure including those involving construction projects.

- NERC's Rothera Wharf has been upgraded as part of the Antarctic modernisation programme and has been designed and built in parallel with the CEEQUAL (Version 5) standard to demonstrate best sustainability practice. The CEEQUAL standard assesses how well the design and build processes deliver sustainability performance in infrastructure projects. Rothera Wharf scored well in all categories and has been awarded an 'Excellent' rating. **6 11 12 15**



- The UK's first affordable energy-positive house has been designed and constructed as part of a project collaboratively funded by EPSRC, Innovate UK and the Welsh Government, and involving a team of researchers from Cardiff University. The SPECIFIC Innovation and Knowledge Centre is a unique design that for the first-time combines reduced energy demand, renewable energy supply and energy storage, using the electricity grid to import and export energy. **7 11 13**
- The Transforming Construction challenge, funded by Innovate UK's ISCF, is helping the construction industry introduce a new procurement approach that is focused on the whole-life value of products. More than 120 organisations, led by the Construction Innovation Hub, have developed the Value Toolkit – a suite of tools and processes that will embed value-based decision making throughout the investment lifecycle. The toolkit is specified as part of the UK government's Construction Playbook, which determines how publicly funded projects will be procured. **8 11 12**

Image credit – Getty Images



Climate change adaptation

UKRI's new Environmental Sustainability Strategy sets us on the path to create Climate Change Adaptation Plans for all our councils in the year ahead, which will begin by understanding the risks environmental change poses to our estates, people and operations, at home and abroad. NERC has already begun this work, providing an example for other councils to follow.

- NERC is developing its Climate Change Adaptation Plan following an external resilience review across its operations. Some of the key actions highlighted in the plan include embedding climate resilience into project and operational planning, improving risk assessment processes and developing a detailed local understanding of climate risks across NERC's operations. **3 11 13**
- The UK Climate Resilience Programme is jointly led by UKRI and the Met Office, with NERC taking a lead on behalf of AHRC, ESRC and EPSRC. The programme is bringing together fragmented research and expertise to undertake robust, multi- and interdisciplinary climate risk and adaptation research to build UK capability for resilience to climate variability and change. Over the past year, the programme has played a vital role in gathering evidence for the third UK Climate Change Risk Assessment (CCRA3). Also informing evidence underpinning the CCRA3 were discussions about whether the UK is on track to adapt to climate change, at a conference





Image credit – Getty Images



jointly hosted by the UK Climate Resilience Programme Champions, the National Centre for Atmospheric Science and the Climate Change Committee. This event is an important part of building a community around climate resilience research. **9 11 13**



Carbon reduction

UKRI has set itself the ambitious target of becoming net zero for its own operational greenhouse gas (GHG) emissions by 2040, whilst also meeting the emissions targets set by the Greening Government Commitments. In the past year we have established our GHG baseline, for 2017-18, and have used that in our work to set out a provisional pathway to meet our 2040 target. We are creating a UKRI Carbon Fund to support the carbon reductions needed across our estate and have begun work on a number of objectives targeting emissions reduction from data centres, travel and fleet. During 2020-21 we transitioned all electricity supplies on our UK owned estate to 100% renewable energy. **13**



Other steps to reduce carbon emissions from our operations include:



- UKRI has been awarded £8 million from the government’s Public Sector Decarbonisation Scheme to improve energy efficiency and reduce carbon emissions at its facilities. Projects include the installation of solar panels, heat pumps, insulation, and LED lighting. It is estimated they will reduce total UKRI emissions by 1,100 tonnes of CO₂-equivalent a year. Sites that will benefit from the funding include the British Geological Survey, Rutherford Appleton Laboratory (RAL), Daresbury Laboratory (DL), London Institute of Medical Sciences, and Polaris House. **7 13**



- NERC is funding a scoping project, Net Zero Oceanographic Capability (NZOC), to inform planning for future low carbon oceanographic research. The research, launched in 2020, is focused around six key areas – science need, policy and regulation, ship technologies, marine autonomous systems, sensor systems and networks, and data ecosystems. Ships are a large contributor to UKRI’s carbon emissions, so research in this area represents a significant opportunity to reduce the organisation’s environmental impact. **9 13 14**

- STFC has been pursuing a number of projects to install solar panels on its buildings and car ports at its RAL and DL sites. In 2020-21, solar panels were installed at RAL that represent an anticipated energy generation of 3,100,000 kWh per year, and the installation of panels on DL car ports is underway with a further anticipated energy generation of 750,000 kWh per year. Once these solar projects are completed STFC will have installed over 10,000 photovoltaic panels on its buildings. **7 13**



Greening of Information and Communications Technology

Information and Communications Technology (ICT) offers alternatives to the environmental impacts of travel, and the global pandemic has vastly accelerated the uptake of this technology across UKRI. In its operations UKRI will continue to address the environmental impacts of ICT through procurement, waste management and energy management, including the introduction of common standards for data centres. In its funding UKRI continues to support innovations in the ICT sector that improve sustainability and energy efficiency.

- Coronavirus restrictions led to an increased and rapid uptake of virtual meetings in UKRI throughout 2020-21. In February 2021 up to 5,000 meetings were taking place via Zoom every day across the organisation. Following the easing of restrictions, virtual meetings are expected to remain a key part of future normal working practices, reducing business travel emissions. To support hybrid working, UKRI has continued to work on implementing a network of over 350 video-enabled meeting rooms across its offices that integrate seamlessly with Zoom. **3 8 9**
- EPSRC has funded a project at the University of Leeds to improve the energy efficiency of optical communications. A project funded through the Intelligent Energy Aware Networks (INTERNET) Programme Grant has shown how the core network, data centres and content distribution networks can be co-designed to improve their energy efficiency by 315 times. These improvements have been incorporated into five core Institute of Electrical and Electronics Engineers (IEEE) standards, and the design is being commercialised by a Leeds spin-out company. **9 12**

Rural proofing

Rural proofing is about understanding the impacts of our policies in rural areas of the UK and where relevant helping to enhance the economies of our rural communities. UKRI’s rural proofing activities include consideration for the importance of the opportunities we create and fund for all regions and areas in the UK, including rural communities. Where relevant, rural proofing is also embedded into decision-making for our rural sites.

- Research England has started to fund a project through its Research England Development (RED) fund to establish a National Innovation Centre for Rural Enterprise (NICRE) to realise a step change in innovation and unlock potential in the UK’s rural economies. Working in partnership across multiple stakeholders, the centre aims to have impacts on business practices, people, policy and places, catalysing rural innovation and enterprise. **9 10**
- In 2020, Innovate UK launched the Transforming Food Production (TFP) Challenge as part of the second wave of the Industrial Strategy Challenge Fund (ISCF). The challenge is focused on providing £90 million of funding on food and agriculture, providing an opportunity for the UK to lead the way in developing innovative climate friendly farming systems for the mutual benefit of people, the environment and our shared prosperity. **2 11 12**

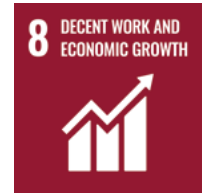


To find out more about sustainability activity across UKRI visit:

<https://www.ukri.org/about-us/policies-standards-and-data/environmental-sustainability/>

Dame Ottoline Leyser
Dame Ottoline Leyser
Chief Executive and Accounting Officer

13th July 2021



3. Accountability Report

Corporate Governance Report

The Corporate Governance Report sets out the governance arrangements of UKRI and comprises:

1. The Director's Report
2. The Statement of Accounting Officer's Responsibilities
3. The Governance Statement

1.

Director's Report

Statutory Background

UK Research and Innovation (UKRI) is an independent non-departmental public body of the Department of Business, Energy and Industrial Strategy (BEIS), established by the Higher Education and Research Act 2017. As UKRI's Chief Executive Officer (CEO) and sole Accounting Officer, I am accountable to the public via Parliament. Parliament monitors and influences UKRI's work through its Select Committees and the Parliamentary Ombudsman.

UKRI Leadership

A full account of UKRI's governance structure can be found within the Performance Report on page 12.

A list of Board and Committee members with their attendance for the period covering 1 April 2020 to 31 March 2021 can be found on page 107 of the Governance Statement. Sir Andrew Mackenzie was appointed as the new UKRI Chair on 9 July 2021.

Registers of interest for UKRI's Board and Committees can be found at: <https://www.ukri.org/about-us/governance-and-structure/conflicts-of-interest/>

Personal data related incidents

UKRI recognises and fully supports the need for effective information governance in protecting its information assets and the information entrusted to it in the course of its business. UKRI's approach to information governance is described in the Governance Statement. The table on the next page sets out the personal data related incidents from 1st April 2020 to 31st March 2021.

During the year, there were two personal data breaches that required notification to the Information Commissioner's Office (ICO). One breach was as a result of a ransomware attack, further details are in the significant issues section. Another personal data breach was reported to the ICO in February 2021. This IT incident impacted Innovate UK EDGE's website. The root cause was found to be human error from an authorised third party supplier. Once notified of the breach UKRI and the third party worked quickly to investigate and contain the incident. Neither breaches resulted in any sanctions being issued by the ICO.

Summary of personal data breaches in 2020-21

| Category | Nature of Incident | Total |
|--------------|--------------------|------------|
| I | Human Error | 91 |
| II | Malicious Intent | 4 |
| III | Process Error | 11 |
| IV | System Error | 7 |
| Total | | 113 |

Freedom of Information

UKRI is subject to the Freedom of Information Act and the Environmental Information Regulations. Responses were provided to 337 requests during 2020-21.

2.

Statement of Accounting Officer's Responsibilities

Under the Higher Education and Research Act 2017, the Secretary of State for Business, Energy and Industrial Strategy with the consent of HM Treasury has directed UK Research and Innovation to prepare a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of UK Research and Innovation and of its income and expenditure, Statement of Financial Position and cash flows for the financial year.

As UKRI's Accounting Officer, in preparing the accounts, I am required to comply with the requirements of the [Government Financial Reporting Manual: 2020-21](#) and in particular to:

- observe the Accounts Direction issued by the Secretary of State, including the relevant accounting and disclosure requirements, and apply suitable accounting policies on a consistent basis;
- make judgements and estimates on a reasonable basis;
- state whether applicable accounting standards as set out in the Government Financial Reporting Manual have been followed, and disclose and explain any material departures in the financial statements;
- prepare the financial statements on a going concern basis; and
- confirm that the Annual Report and Accounts as a whole is fair, balanced and understandable and I take personal responsibility for the Annual Report and Accounts, and the judgments required for determining that all reasonable steps have been taken to ensure the Annual Report and Accounts as a whole is fair, balanced and understandable.

The Department of Business, Energy and Industrial Strategy has appointed the CEO as Accounting Officer of UK Research and Innovation. The responsibilities of an Accounting Officer, including responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping proper records and for safeguarding UK Research and Innovation's assets, are set out in '[Managing Public Money](#)' published by HM Treasury.

As the Accounting Officer, I have taken all the steps that I ought to have taken to make myself aware of any relevant audit information and to establish that UK Research and Innovation's auditors are aware of that information. So far as I am aware, there is no relevant audit information of which the auditors are unaware. I take personal responsibility for the Annual Report and Accounts, and the judgments required for determining that all reasonable steps have been taken to ensure the Annual Report and Accounts as a whole are fair, balanced and understandable.

3.

2020-21 Governance Statement

Scope of Responsibility

This Governance Statement, for which I take personal responsibility, describes the dynamics of UKRI, its governance, risk and internal control arrangements, and how successfully the organisation has coped with the challenges and opportunities presented in just its third year since launch.

This Statement explains how UKRI has maintained a sound system of governance and taken significant steps to enrich internal control. It is my responsibility to ensure sound governance underpins the achievement of UKRI's policies, aims and objectives whilst safeguarding the public funds and UKRI assets. I am also accountable for ensuring UKRI is administered prudently and economically and that resources are applied in accordance with HM Treasury's '[Managing Public Money](#)' guidance and the responsibilities assigned to me by the Department for Business, Energy and Industrial Strategy.

The Purpose of Internal Control

The system of internal control is designed to manage risk to a reasonable level rather than to eliminate all risk of failure to achieve policies, aims and objectives. It can therefore only provide reasonable and not absolute assurance of effectiveness. The system of internal control is based on an ongoing process designed to identify and prioritise the risks to the achievement of the policies, aims and objectives of UKRI, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically.

Capacity to Handle Risk

As CEO, I have overall responsibility for ensuring there is an effective risk management system in place within UKRI for meeting all relevant statutory requirements for ensuring adherence to guidance and for the continued effective identification and management of all risks. Please refer to page 109 for more detail on UKRI's Risk and Internal Control Framework; further accountability and responsibility for elements of risk management are set out in the UKRI's Risk Management Strategy and Policy.

Governance Framework

In my role as UKRI's Accounting Officer, I am supported by the UKRI Board, the nine Executive Chairs of the Councils, and the Executive team within UKRI, who use a range of management information to monitor performance and inform decision making. The Executive Chairs, in turn, are supported and challenged in the delivery of their specific aims and objectives by their Councils, which comprise the Executive Chair and ordinary Council members.

UKRI Board Overview

The UKRI Board ('the Board') comprises a very strong team of research and business leaders who work with me and my Executive team to ensure that UK research and innovation continues to be world leading.

The Board is Chaired by the UKRI Chair and comprises me as CEO, the Chief Finance Officer (CFO) and 9-12 other non-executive members. All non-executive members are appointed by the Secretary of State for BEIS and details of membership can be found at: <https://www.ukri.org/about-us/our-structure/ukri-board/>

Mustafa Suleyman and Vivienne Parry stood down as Board members on 29 October 2020 and 4 May 2021, respectively. Sir Harpal Kumar stepped down as Innovation Champion on 1 November 2020 but remained a member of the Board. Dr John Fingleton was asked to join the Board as an observer from 1 November 2020 to cover the Innovation Champion role until a permanent Innovation Champion was appointed. Sir Peter Bazalgette and Professor Max Lu stood down on 24 March 2021. UKRI is currently recruiting new Board members.

The Board is UKRI's top-level decision-making body and exercises full and effective control over the activities of UKRI and its people. The Board provides strategic leadership and makes decisions on issues of major importance, including key

strategic objectives and targets; corporate strategy; major decisions involving the use of financial and other resources; and substantive personnel issues including key appointments.

The Board met six times during this financial year and the key areas discussed included:

- UKRI's response to the pandemic (including the sustainability of the research and innovation system);
- strategy development and preparations for a new funding settlement;
- cross-cutting policy areas, including international strategy and EU exit, equality, diversity and inclusion (EDI), open research, and people and culture;
- development of the UK Research and Development Roadmap;
- corporate governance, risk and assurance; and
- the updated Performance Management Framework.

Minutes of the Board's meetings are published on UKRI's website at: <https://www.ukri.org/about-us/our-structure/ukri-board/>

All Board members are required to declare any personal or business interests which may influence their judgement in discharging their obligations, or which may be perceived to do so. These interests are published on UKRI's website at: <https://www.ukri.org/about-us/our-structure/conflicts-of-interests/#contents-list>

The UKRI Board's approach to governance aims to comply with the HM Treasury / Cabinet Office's Corporate Governance in Central Government Departments: Code of Good Practice (the Code), and the Cabinet Office Code of Good Practice for Partnerships between departments and arm's-length bodies. An external Board Effectiveness Review to evaluate the Board's performance was completed in 2020-21.

Audit, Risk, Assurance and Performance Committee

The Audit, Risk, Assurance and Performance Committee ('ARAPC') is chaired by Fiona Driscoll, a non-executive Board Member and includes independent members Richard Bacon and Jane Madeley. Christina Coker, Fiona Sheridan, Ian Wilson and Philip Greenish were recruited as independent members in March 2021 and joined the committee in the new financial year. The CFO and I regularly attend ARAPC meetings.

The role of ARAPC is to support the UKRI Board and Accounting Officer by reviewing UKRI's operational performance, the comprehensiveness and reliability of assurances on governance, risk management, the control environment and the integrity of financial statements. ARAPC provides oversight and independent challenge regarding the design and implementation of policies and processes. Meetings are attended by representatives from BEIS, the National Audit Office (NAO) and Government Internal Audit Agency (GIAA), UKRI's internal audit service provider.

ARAPC held five full meetings in 2020-21 and has focused on:

- UKRI's assurance and corporate risk management arrangements, including oversight of cyber security, COVID-19, funding assurance, people, counter-fraud and Innovate UK's control environment;
- findings from the internal audit programme for 2020-21 and internal audit plans for 2021-22;
- performance of UKRI's major projects and programmes, including ongoing oversight of UKRI's Reforming our Business programme;
- preparation for the 2020-21 Annual Report and Accounts; and
- development of UKRI's performance management framework.

ARAPC has established links with the BEIS Audit and Risk Committee to enable clear BEIS departmental sight of UKRI's risk and assurance arrangements.

Nominations and Remuneration Committee

The Nominations and Remuneration Committee is chaired by the UKRI Chair, and comprises the Board members Sir Peter Bazalgette, Professor Julia Black, Fiona Driscoll and Lord David Willetts. I attend as CEO and the CFO and Chief People Officer (CPO) are invited attendees without decision-making powers. The Secretary of State, or a representative, is entitled to observe meetings and receive all relevant committee papers. An attendee from BEIS is therefore also present. The Committee is responsible for determining the membership and effectiveness of the nine UKRI Councils, reviewing people strategy, and having strategic oversight of senior remuneration with regard to diversity, equal pay and performance-related pay. The Committee formally met three times in the past year, and held four meetings via correspondence.

Board Investment Committee

During the year UKRI has changed the assurance route for its major investments and established the Board Investment Committee (BIC). BIC is a sub-committee of the UKRI Board and promotes accountability for financial decision making by the Executive, as well as strengthening the independent challenge provided by the Board on UKRI's large, novel or contentious investments and projects. BIC formally met twice during the year.

BIC is currently chaired by the UKRI Chair and its initial members were Lord David Willetts, Lord John Browne, Professor Julia Black and the UKRI CFO and Executive Director of Strategy, Performance and Engagement. The Executive Director of Strategy, Performance and Engagement was replaced by the UKRI Chief Operating Officer in March 2021. I also attend BIC meetings.

The previous Investment Committee has been wound down and replaced by the Investment Advisory Working Group, comprising a rotating pool of senior experts from across UKRI and advising the CFO. Investments are also ratified by ExCo before progressing to departmental assurance processes.

Executive Committee

I chair the UKRI Executive Committee (ExCo) which comprises the nine Executive Chairs, the CFO, Executive Director of Strategy, Performance and Engagement, and Chief Operating Officer. Executive Committee is responsible for providing strategic advice to the UKRI Board and constitutes the executive leadership of UKRI. The Director of External Relations, Communications and Public Engagement and CPO also attend regularly. Executive Committee met twenty-eight times last year and now meets twice every month. Its areas of operational focus have included UKRI's response to the COVID-19 pandemic (including the impact of COVID-19 on the sustainability of the research and innovation system), UKRI's programme for Reforming our Business, planning for EU transition, governance, risk and assurance, communications, development of a UKRI Corporate Plan and staff performance and reward. Policy areas considered have included strategy and preparations for a new funding settlement, international strategy, commercialisation, equality, diversity and inclusion (EDI), place, people and culture, ethics and talent.

Table of Attendance for UKRI Senior Executive and Non-Executive Boards and Committees

| | UKRI Board | ARAPC | BIC | Nom/Rem Committee | ExCo |
|----------------------------------|------------|----------|----------|-------------------|-----------|
| Number of meetings | 6 | 5 | 2 | 3 | 28 |
| Board Members | | | | | |
| Sir John Kingman | 6/6 | - | 2/2 | 3/3 | - |
| Sir Mark Walport* | 1/1 | 1/1 | - | - | - |
| Professor Dame Ottoline Leyser* | 5/5 | 4/4 | 2/2 | 2/3 | - |
| Mike Blackburn (CFO)* | 1/1 | 3/3 | - | - | - |
| Siobhan Peters (CFO)* | 5/5 | 4/4 | 2/2 | 3/3 | - |
| Sir Peter Bazalgette | 6/6 | - | - | 2/3 | - |
| Professor Julia Black | 6/6 | - | 1/2 | 2/3 | - |
| Professor Sir Leszek Borysiewicz | 6/6 | - | - | - | - |
| Lord John Browne | 6/6 | - | 1/2 | - | - |
| Fiona Driscoll | 6/6 | 5/5 | - | 3/3 | - |
| Sir Harpal Kumar | 6/6 | - | - | - | - |
| Professor Max Lu | 6/6 | - | - | - | - |
| Vivienne Parry | 6/6 | - | - | - | - |
| Mustafa Suleyman* | 3/3 | - | - | - | - |
| Lord David Willetts | 6/6 | - | 2/2 | 2/3 | - |
| Dr John Fingleton* | 3/3 | - | - | - | - |
| Professor Dame Sally Davies | 5/6 | - | - | - | - |
| Professor Ian Diamond | 4/6 | - | - | - | - |
| ARAPC Independent Members | | | | | |
| Richard Bacon | - | 5/5 | - | - | - |
| Jane Madeley | - | 5/5 | - | - | - |
| UKRI Executive | | | | | |
| Professor Dame Ottoline Leyser | - | - | - | - | 16/16 |
| Professor Sir Mark Walport | - | - | - | - | 12/12 |
| Siobhan Peters (CFO) | - | - | - | - | 16/16 |
| Mike Blackburn (CFO - then COO) | - | - | - | - | 22/24 |
| Tim Bianek* | - | - | - | - | 4/4 |
| Isobel Stephen/Emma Lindsell | - | - | 1/2 | - | 27/28 |
| Dr Ian Campbell* | - | - | - | - | 19/21 |
| Mike Biddle* | - | - | - | - | 7/7 |
| Professor Lynn Gladden | - | - | - | - | 24/28 |
| Professor Jennifer Rubin* | - | - | - | - | 21/22 |
| Professor Alison Park* | - | - | - | - | 6/6 |
| David Sweeney | - | - | - | - | 28/28 |
| Professor Andrew Thompson* | - | - | - | - | 15/15 |
| Professor Christopher Smith* | - | - | - | - | 13/13 |
| Professor Mark Thomson | - | - | - | - | 25/28 |
| Professor Fiona Watt | - | - | - | - | 25/28 |
| Professor Melanie Welham | - | - | - | - | 27/28 |
| Professor Duncan Wingham | - | - | - | - | 24/28 |

Notes

- Sir Mark Walport's term as UKRI CEO ended on 28th June 2020.
- Professor Dame Ottoline Leyser's term as UKRI CEO began on 29th June 2020.
- Mike Blackburn's term as UKRI CFO ended on 26th June 2020. Mike became UKRI COO on 1st April 2020. Mike's term as UKRI COO ended on 5th February 2021.
- Siobhan Peters' term as UKRI CFO began on 29th June 2020.
- Mustafa Suleyman's tenure on the Board ended on 29th October 2020.
- John Fingleton's tenure as Board observer began on 1st November 2020.
- Tim Bianek's term as UKRI COO began on 8th February 2021.
- Dr Ian Campbell's term as interim Innovate UK Executive Chair ended on 25th November 2020. Mike Biddle and Simon Edmonds jointly covered the Executive Chair function for Innovate UK from 1st December 2020. Mike Biddle attended Executive Committee meetings until the appointment of Indro Mukerjee as Executive Chair and Chief Executive Officer for Innovate UK on 5th May 2021.
- Professor Jennifer Rubin's term as ESRC Executive Chair ended on 31st December 2020.
- Alison Park was appointed as Interim ESRC Executive Chair on 1st January 2021.
- Professor Andrew Thompson's term as AHRC Executive Chair ended on 31st August 2020.
- Professor Christopher Smith was appointed as AHRC Executive Chair on 1st September 2020.

Strategy Committee

The Strategy Committee (StratCo) is chaired by the Executive Director of Strategy, Performance and Engagement and comprises senior strategy representatives from the nine Councils as well as directors with crosscutting responsibilities such as talent and infrastructure. StratCo provides expertise and advice on the development and implementation of UKRI's research and innovation strategy. The committee met eleven times last year and provides input on emerging areas of strategy before they are considered by the Executive Committee.

People, Finance and Operations Committee

The People, Finance and Operations Committee (PFO) is chaired by the CFO and comprises senior operational professionals from the central Corporate Services teams and councils. PFO is responsible for establishing and monitoring effective operational frameworks and policies and providing advice to Executive Committee on operational matters. PFO also receives regular reports from its sub-committees, including Security Committee. PFO met ten times in the year and focused on financial reporting, grants management, operational performance and people policies.

Health and Safety Management Committee

The Health and Safety Management Committee (HSMC) is chaired by the CFO and comprises the UKRI Head of Health and Safety, UKRI Head of Office Estates, and senior operational professionals and health and safety experts from across UKRI. The Committee is responsible for monitoring the capability and performance of health and safety management systems with the objective of regulatory compliance, and for establishing continuous improvement in health and safety performance. HSMC met four times in the year and focused on UKRI's health and safety policy, codes, systems, reporting, performance and internal audit. Health and Safety matters are also considered at the Health and Safety Consultative Committee which is co-chaired by the CFO and a representative from the Trade Unions.

UKRI Councils

The Higher Education and Research Act 2017 sets out that each of the nine Executive Chairs is supported by a Council of between five and twelve ordinary members, one of whom is a Senior Independent Member (SIM). Councils are chaired by the Executive Chairs, although the SIM is often asked by the Executive Chair to chair all or part of the Council meetings. Most of the Council members are persons who are neither Board members, nor employees of UKRI. Each Council met between four- and six-times last year. Councils are responsible for making decisions, as delegated to them by UKRI, on scientific, research and innovation matters within their disciplines, as well as supporting and challenging

Executive Chairs to ensure the effective delivery of their responsibilities. This entails holding Executive chairs to account, including for performance; quality of portfolio; delivery against the Council's Strategic Delivery Plan; and reporting of outputs, outcomes and impacts. The full list of Council members can be found at: <https://www.ukri.org/about-us/our-structure/council-members/#contents-list>.

A cyclical programme of attendance at the meetings of each Council by myself and the Chair, to discuss Council priorities and gather input for UKRI's strategy, is now firmly embedded within annual planning activities. In addition, we have built on the success of the first engagement event between the Board and Councils in April 2019, and now hold a bi-annual conference in which knowledge, expertise and best-practice is shared. The last two events in November 2020 and May 2021 were both very positively received.

In 2020, as part of Council member succession planning, we appointed 33 new members to the nine Councils, seeking representation across diverse communities, including sector and place. They will help ensure that our organisation makes the very best choices, investing wisely and developing capability and capacity for the future.

Risk & Internal Control Framework

The UKRI system of internal control is designed to manage risk to an appropriate and proportionate level rather than to eliminate all risk of failure to achieve policies, aims and objectives. UKRI has a robust risk management framework designed to support informed decision-making concerning the risks that effect our ability to achieve our objectives. The framework provides a consistent approach to identifying, assessing and dealing with risks facing us, to ensure that they do not exceed the level of risk the organisation is willing to accept. The framework is designed to manage, rather than eliminate, the risks to UKRI's objectives. The UKRI Risk Management Framework includes a Risk Management Policy and Strategy. The Risk Management Framework is supported by a central team with qualified Risk Business Partners to embed effective Risk Management across UKRI. The UKRI's Risk Management Framework complies with the requirements of HM Government's [Orange Book](#).

UKRI has set a clear ambition for the next year to continue refining the Risk Management Processes. UKRI's revised [risk appetite statement](#) has set clear boundaries for risk taking, to ensure a positive risk culture that is enabled, not risk-averse and supports effective decision making across the organisation. As part of this work UKRI completed a Risk Maturity Assessment in January 2021.

The Executive Committee, supported by PFO, oversees the implementation of the Risk Management Strategy and the continued evolution of UKRI's approach to risk management.

Counter Fraud

The UKRI Fraud control framework is designed to minimise the risk of fraud and includes a Counter Fraud and Bribery policy and an approved Counter Fraud strategy with key target outcomes. This complies with the requirements of the Cabinet Office Functional Standards for Counter Fraud and sets out UKRI's approach with an action plan for the year.

In 2020, UKRI were assessed by the Cabinet Office against the [Government Functional Standard GovS 013: Counter Fraud](#), achieving a green rating against all 12 standards.

A recent internal Audit report on UKRI's management of fraud investigations provided a Moderate assurance rating.

The Executive Committee, supported by PFO, oversees the implementation of the Counter Fraud Strategy and the continued evolution of UKRI's approach to Counter Fraud.

Alongside Fraud investigations, other Counter Fraud team activities include:

- as part of the post award assurance response to the Government's COVID-19 pandemic financial support schemes, extensive work has been undertaken to establish the key high-risk areas and how fraud resources could be applied to respond to these specific risks;
- the Cabinet Office Post Award Assurance exercise has not identified any duplicate Government funding claims across all COVID-19 grants. This data is being analysed across data sets to identify any potential dishonest activity; and
- launching the updated Counter Fraud E-learning Programme, which provides generic fraud awareness training to all staff. This is supported by other training for key areas.

Project Delivery

The UKRI Project Delivery profession continues to expand with over 350 members benefitting from the tools, training and development it offers. In addition, the Project Delivery Competency Framework continues to be used to bring consistency to job roles when recruiting.

The project management tool, Verto, was launched in June 2020 for the IUK and STFC Councils as well as the ISCF, Digital, Data and Technology (DDAT) and UKRI Project Development & Improvement (PD&I) departments. Verto provides a set of standard frameworks for managing projects across UKRI for continuous improvement, as well as project methodologies such as Waterfall and Agile. The tool also provides resource planning functionality and facilitates reporting into BEIS for UKRI's Major Projects Portfolio. A second Verto project is currently being initiated to onboard further organisations and functions within UKRI and deliver additional functionality including a programme lifecycle and portfolio level reporting. Seven Specific Interest Groups (SIGs) have been established to facilitate knowledge sharing and development of best practice in key project management areas including risk management, benefits realisation and learning from experience.

A Business Case hub is now established and is providing expertise covering HMT's five case business models, primarily helping projects and programmes within UKRI's Major Projects Portfolio produce business cases that set projects up for successful delivery, and in doing so are approved by BEIS at first submission.

In response to GIAA recommendations and in line with best practice, a benefits management framework intended for use across UKRI is currently being developed along with definition of a minimum quality standard for templates and processes. Both will be piloted within the Reforming our Business (RoB) Portfolio before seeking approval from PFO for rollout more widely. Twelve staff have now completed level 4 Project Management Apprenticeships, and a recruitment exercise has now started for a level 6 cohort.

Simpler and Better Funding Programme

UKRI has made a commitment to replace its current research and innovation funding services as these are no longer deemed fit for purpose.

A programme to design and build the new funding service is well under way, including a review of supporting processes. The scope was further expanded in December 2020 to include projects that consider the wider challenges around reducing UKRI's bureaucracy.

The aim of the programme is for UKRI to have a single, simpler end-to-end funding process with an operating model to run it. The programme is planning that by late 2024 there will be a fully operational, unified digital service delivering all UKRI funding opportunities. This will replace legacy systems, remove off system funding, replace Innovate UK's Innovation Funding Service system and support funding processes for Research England.

Regularity and Propriety

UKRI is committed to establishing and applying appropriate regularity and propriety standards, including embedding appropriate cultures and behaviours, and does not tolerate any form of fraud, bribery or corruption. The key components in this regard are UKRI's:

- Counter Fraud and Bribery policy and arrangements;
- Gifts and Hospitality policy;
- Whistleblowing policy;
- Complaints policy; and
- Conflicts of Interest policy.

I confirm that for 2020-21:

Neither I nor my staff authorised a course of action, the financial impact of which is that transactions infringe the regulatory requirements as set out in [Managing Public Money](#):

- there were no novel, contentious or repercussive transactions;
- building on joint work by UKRI and BEIS HR teams to improve the governance process for managing senior management remuneration, no new UKRI employees or contractors have received remuneration in excess of the amount approved by BEIS and HM Treasury. However, there are still seven legacy contracts awaiting approval by HM Treasury. Of these, six could give rise to a contractual eligibility for performance related pay over the HM Treasury threshold and one has exceeded the threshold. For the remaining case, remuneration has been in excess of amounts approved by BEIS and HM Treasury; and
- no instances of fraud which materially impacted UKRI were identified within UKRI and UK SBS; 66 fraud referrals were received and investigated by UKRI's Counter Fraud team, which resulted in interventions (recovery, withdrawal, prevention and termination) valued at £1,391,899.

Pay Remit

I can confirm that UKRI is complying with Civil Service pay-setting requirements as outlined in the Cabinet Office Pay Remit Guidance.

Tax Arrangements of Public Sector Appointees

The government's review of tax arrangements for public sector appointees highlighted the possibility of artificial arrangements to enable tax avoidance. UKRI's senior staff are all paid through the payroll and controls exist to provide assurance that appropriate tax arrangements are in place to cover other in-year appointees. The Interim CFO and Interim Chief Operating Officer was contracted through Public Sector Resourcing, inside IR35 off-payroll working rules. UKRI provides BEIS with tax assurance evidence on a yearly basis, which forms part of their summary of BEIS tax assurance data at www.gov.uk.

Quality Assurance of business-critical models

During 2020-21 UKRI agreed and began to implement an approach to identify, review and maintain business-critical models to a high and consistent standard, backed up by a robust system of governance to assure this. This approach utilises existing processes and expertise within UKRI and aligns UKRI practice with recommendations and standards for analytical modelling as outlined in [Managing Public Money](#), the [MacPherson Review](#), and the [Aqua Book](#). The approach will be fully implemented and made operational in 2021.

Ministerial Directions

There were no Ministerial directions given in 2020-21.

Information Governance and Security

Information security is the cornerstone in the design and implementation of the information services UKRI provides to its employees, and in how it protects its staff and information from attack and compromise. Information security is a key corporate risk. It is reviewed regularly by UKRI's executive leadership and actively managed through appropriate mitigating actions.

UKRI implements best practice throughout its Information Security framework, informed by the Cyber Essentials Scheme, 10 Steps to Cyber Security, the National Cyber Security Centre's advice and the Government's Information Security Framework. During the year, the Information Governance Framework continued to be developed within UKRI and the UKRI Information Security function continued to develop its services, policies and standards to ensure a consistent approach across the organisation.

The Data and Information Governance Committee, reporting to the People, Finance and Operations Committee, promotes strategic interaction between all key data and information stakeholders to ensure that data and information are valued, accessible and protected where appropriate. The Security Committee, also reporting to the People, Finance and Operations Committee, was established in 2020 to support UKRI's mission by ensuring the appropriate security measures are developed, endorsed, implemented and monitored.

UKRI has an ongoing programme of work to continue embedding best practice across the organisation and to deliver sustained Data Protection Act and GDPR compliance. Non-compliance with data protection principles is a key risk that is actively managed through appropriate mitigating actions.

UKRI recognises and fully supports the need for effective information governance in protecting its information assets and the information entrusted to it in the course of its business. Compliance with data protection laws is taken very seriously. UKRI provides all employees with training on their responsibilities and has introduced a modular approach with information security and data protection refresher training provided throughout the year. UKRI continues to monitor and assess its information risks to identify and address any weaknesses and ensure continuous improvement of its systems and procedures. During the year, there were two personal data breaches that required notification to the Information Commissioner's Office (ICO).

Review of effectiveness

As Accounting Officer, it is my responsibility to ensure UKRI is maintaining a sound system of governance and internal control. In 2020-21 I look to the work of the ARAPC, the Executive Committee and its supporting Committees, the internal audit service provided by GIAA, UKRI's Funding Assurance Programme, the assurance opinion provided by the Accounting Officer of UK SBS, and comments made by the NAO as our external auditors in their management letter and other reports to inform my view.

Executive Accountability Assessment

Executive Committee members and their teams performed their annual assessment of the operational effectiveness of internal controls in their spheres of responsibility using UKRI's Integrated Governance, Risk and Assurance Framework (IGRAF).

The IGRAF shows information on the key controls that are in place to manage recurrent risks across UKRI. This includes legal, regulatory and government controls mandated in our delegation from BEIS, and the good governance and best practice frameworks that we have committed to meeting. This is mapped to controls to provide an assurance opinion on their effectiveness.

The results have been reported to the Executive Committee as well as to the Audit, Risk, Assurance and Performance Committee (ARAPC), stating that:

- the majority of controls operating across UKRI are assessed as having medium or high assurance for their effective operation;
- improvements to low scoring assurance areas have been identified, with actions to address perceived control weaknesses in the following areas: Publication of our Welsh Language Scheme – Subsidy Control from the EU transition - Ability to meet Public Records Act requirements – Business continuity arrangements for our Digital, Data and Technology (DDaT) department – Operating controls within Innovation Loans Ltd; and
- work continues to finesse the delegation structure to best reflect UKRI's operating model. Actions to improve the UKRI control environment and risk management processes have been captured and are being tracked so that improvements can be reflected in future iterations of the IGRAF.

I am pleased the Summary evidences that good progress has been made, with an overall improvement in assurance ratings from last year. The IGRAF is proving an effective tool for maintaining good practice and ensuring timely measures are taken to improve control where required.

GIAA Internal Audit Opinion

The Group Chief Internal Auditor (GCIA) is required to provide me with an opinion on the overall adequacy and effectiveness of UKRI's framework of governance, risk management and control.

In her annual report and opinion, the GCIA has provided a Moderate opinion for 2020-21. This is a maintained level of assurance from 2019-20 with a similar proportion of engagements in each rating category.

This has been achieved against a backdrop of significant uncertainty and pressure, not least due to the highly challenging circumstances presented by COVID-19. It was also a year in which permanent appointments to the Executive Committee (ExCo) including the Chief Executive, Chief Finance and Chief Operating Officers were bedding in.

The GCIA concluded that UKRI responded well to COVID-19 both in terms of its provision of funding and managing operational risk. In relation to change management more broadly, she reported that there is greater clarity between our corporate reform and business as usual activities through the set-up and scoping of our Reforming our Business portfolio. The introduction of risk appetite has also improved our risk management framework, targeted discussion at both an Executive and Audit, Risk, Assurance and Performance Committee (ARAPC) level. Alongside this, the GCIA sets out that we have made demonstrable improvements in implementing agreed actions in response to recommendations raised, including several longer standing high priority ones.

Areas of focus for the upcoming year are to improve clarity of governance over cross-cutting activities, successfully implement a consolidated HR function and, being mindful of the changing external environment and increased COVID-19 grant funding flows, to keep fraud and error risk in view.

Assurance on our funding

UKRI has adopted an annual funding assurance assessment process to evaluate whether the research and innovation funding invested during the year continues to accord with the purposes intended and set out in the grant or funding agreements. These procedures allow weaknesses or levels of ineligible spend to be identified and assessed, and ultimately enable me to form a view that my responsibilities as Accounting Officer have been properly discharged. A breakdown of expenditure by council can be found in the overview section.

Research Councils

The assurance provided through the research councils' funding assurance framework indicates a low level of current and historic errors for all councils. The Head of Funding Assurance provides an opinion of Moderate assurance based upon the programme of work undertaken in 2020-21, with the following highlights:

- 31 UK funding assurance assignments were undertaken, of which one achieved Limited assurance, 24 Moderate assurance, and six achieved Substantial assurance. Ineligible expenditure of £293k was identified while undertaking these assignments;
- those previously receiving limited assurance continue to operate under special measures, with all final expenditure statements subject to additional checks by UKRI's Funding Assurance team;
- the scope of assurance assignments undertaken throughout 2020-21 was extended to assess the additional risks posed by the COVID-19 pandemic; seeking to understand how effective controls were during lockdown periods and ongoing remote working arrangements. Although some enhancements were required, overall, controls were found to be operating effectively;
- 12 assignments on GCRF Hub grants which involve a substantial number of overseas partners took place in 2020-21. Post-award checks were undertaken on 82 grants awarded directly to overseas Research Organisations. This involves undertaking regular transaction testing throughout the lifetime of projects with the frequency determined by the risk rating assigned during the initial due diligence process; and
- one funding assurance assignment was completed on an overseas research organisation. This was for a grant led by a Canadian University with several partners in Low and Middle Income Countries. The University was given a substantial assurance rating and no recommendations were made.

Innovate UK

Innovate UK funds businesses to help commercialise world-class UK innovation, and as such there is an inherently higher level of risk associated with this funding. To manage this risk, the funding assurance approach which Innovate UK utilises has a focus on both pre-award due diligence and live monitoring activities, as well as this year increasing the amount of retrospective assessment outside of the work carried out by the UKRI Counter Fraud Team. Various assurance arrangements exist across all of the £1.6bn Innovate UK grants, comprising these key elements:

- pre-award due diligence;

- requirement for match funding (not applicable for Continuity Grants);
- claims paid in arrears (not applicable to Fast Start & Continuity Grants);
- monitoring officers;
- independent Accountant Reports (for awards of more than £25k);
- post-award Funding Assurance team; and
- independent investigations by UKRI Counter-Fraud.

The Post-award Funding Assurance team carried out 1,645 reviews this year, identifying £153k of ineligible spend which we are recovering from participants and £189k costs removed as not incurred and defrayed in the period. The team was also asked to undertake activity focused on the Continuity Grants and Fast Start competition run in response to COVID-19 which, as both of these types of funding were awarded up front, increased Innovate UK's risk exposure this year. The UKRI Counter Fraud team have conducted investigations covering more than £22m worth of Innovate grants in 2020-21, resulting in £786k of fraud identified and a further £1.9m prevented.

By considering the assurance from Innovate UK's due diligence and monitoring arrangements, risk and controls and the work of internal audit and the Cabinet Office, Innovate UK is able to provide a moderate level of assurance to the public that funds are being spent in accordance with the principles contained within 'Managing Public Money'. Work is on-going via Innovate UK's Achieving Customer Excellence programme to improve our policies and processes to achieve increased assurance from the controls used to manage our grant funding risk. This includes work to utilise data analytics to identify duplicate applications as well as improving our funding recovery capacity.

Several gaps were noted by a recent audit of Innovate UK grants, which are being addressed through the work of Innovate UK's Accelerating Customer Excellence (ACE) programme to improve our policies, processes and control environment to achieve increased assurance from the controls used to manage our grant funding risk. This includes work to utilise data analytics to identify duplicate applications as well as improving our funding recovery capacity.

Research England

The Office for Students, as the regulator of the English higher education system, assesses and monitors the financial sustainability of higher education institutions in England. Research England only funds those institutions that have met the thresholds for financial sustainability. Alongside the assurance provided by the Office for Students and the joint OfS/RE Data Adjustments Panel process, Research England commissions independent audits to seek assurance on the effectiveness of the systems and processes used to inform quality-related funding. In total eight audits were completed, and no material issues were identified, providing positive assurance over systems and processes.

By combining the assurance received from the Office for Students with the work of the Funding Assurance Programme and internal audit, I am able to assure the public that funds are being spent in accordance with the principles contained within [Managing Public Money](#).

I am satisfied that there are no issues to report here.

Diamond Light Source Ltd.

Diamond Light Source Ltd (DLS) was first established as a Joint Venture by the Science and Technology Facilities Council (which became part of UKRI in 2018) and Wellcome Trust in 2002. As a body classified by the Office for National Statistics to central Government, Diamond Light Source Ltd (DLS) is required to comply with the central Government control framework. The 2020-21 financial year was a transitional period for DLS to attain alignment with Government controls, working with UKRI to establish and strengthen processes and mechanisms for ensuring compliance with these from 1st April 2021, and obtain retrospective approval for pay arrangements since the ONS classification was made.

Shared Services Assurance

For the year 2020-21, UKRI received services from UK Shared Business Services Ltd (UK SBS), another BEIS partner organisation, which also provides services to BEIS.

UKRI receives bi-annual assurance reports from UK SBS on the design and effectiveness of its internal control framework. UK SBS also receives its internal audit provision from GIAA. They are in receipt of two annual audit opinions,

one for UK SBS customer facing operations and the other for internal operations. For 2020-2021 these have both been awarded a moderate assurance.

Further narrative and detail of their annual assurance opinions are available within the UK SBS Governance Statement, which is published separately as part of its Annual Report and Accounts.

Significant issues

COVID-19

Throughout the pandemic, UKRI has responded actively as an organisation, embraced flexible working practices to make sure those who could work effectively at home could do so and directed funding as appropriate to aid research. Science facilities have been kept operational by enhancing their already rigorous health and safety controls, to ensure colleagues can perform their duties in a COVID-19 secure environment. UKRI's incident management structure has been initiated to keep the situation under constant review and ensure that the organisation can quickly adapt to changes.

EU Transition

UKRI undertook significant activities to ensure continuity of funding in the event of non-association or a delay to the UK's association to Horizon Europe. These included developing short-term alternative funding arrangements for Horizon Europe schemes and other funding opportunities, including an ambitious UK Discovery Fund.

Agreement on the EU-UK Trade and Cooperation Agreement was reached on 24th December 2020 and ratified by the UK Parliament on 30th December 2020. Association will give UK scientists, researchers and businesses access to funding under the Horizon Europe programme on equivalent terms to organisations in EU countries.

UKRI has now ceased all activities to prepare alternatives to Horizon Europe in a controlled way, following formal project and programme management processes and working closely with BEIS. UKRI will continue work to provide support to the UK's research and innovation community to maximise the UK's participation in Horizon Europe.

Cyber Attack

In January 2021, cyber-attacks compromised servers hosting the www.ukro.ac.uk website and installed ransomware on these and an isolated Biotechnology and Biological Sciences Research Council (BBSRC) network. UKRI teams were able to promptly recover the data, without recourse to payments, and put in place temporary measures to enable critical work to continue safely.

UKRI's Security Committee has overseen the response to this attack, ensuring comprehensive security measures have been developed, approved and implemented to ensure the organisation's security systems are resilient to attacks.

Capacity and Capability of Staff

The risk of failure to attract and retain sufficient quality and/or quantity of staff was reviewed in October 2020 and the risk score reduced from 'very high' to 'high', which still remains above appetite. This year, key initiatives to address capability and capacity challenges across UKRI have included the launch of a project to reform recruitment processes across UKRI; increased resourcing to drive forward the organisation's attraction methods; the continued rollout of workforce planning practice; and the implementation of a closer partnership between HR and Finance functions to provide more accurate FTE forecasts for next year.

Notably, the recent success of UKRI's early careers recruitment campaign saw a 400% increase in application numbers compared to this time last year.

Senior Leadership Changes

The Senior Leadership across UKRI has seen significant change during 2020-21. UKRI has completed the first stage of the transformation of the Senior Appointments team, enhancing its capability and capacity, and developing a succession plan for our most senior roles. The transformation will continue throughout 2021 to ensure UKRI is capable of securing the highest calibre of candidates to our senior roles and maintaining continuity.

ODA

In December 2020 the Chancellor announced that UK would temporarily reduce ODA allocations from 0.7% of Gross National Income, to 0.5% GNI, in response to the impact of the COVID-19 pandemic on public finances. The Department for Business, Energy and Industrial Strategy's ODA allocation to UKRI has significantly reduced its planned ODA expenditure for 2021-22, leading to a £125 million budget upon initial assessment and a £120 million gap between allocations and commitments to grant holders.

UKRI is working to ensure ODA activity is strategically aligned with HMG's priorities for ODA and has established a critical incident framework to manage the significant reduction in ODA allocations, particularly for GCRF and Newton. UKRI will continue to work closely with its partners to maximise the benefits from the available funding.

Trusted Research

The continued success of research and innovation within the UK relies on our ability to work collaboratively with partners and suppliers both at home and abroad. UKRI's approach to Trusted Research aims to support the integrity of the system of international collaboration and safeguard our research and its outputs. In line with the Centre for the Protection of National Infrastructure's (CPNI) guidance on good governance to support Trusted Research, UKRI is developing a policy, and undertaking a review of associated processes, to assist staff in the identification and management of risks and threats associated with international collaborations. A supporting governance structure will ensure our approach remains visible at all levels across the organisation; and will support regular senior discussions on high-risk activities and our reputational, ethical and national security risks.

Conclusion

I have considered the accounts and evidence provided by colleagues across UKRI in the production of this Governance Statement as well as independent advice and assurance provided by our organisation's Audit, Risk, Assurance and Performance Committee.

Based on the review outlined above, I conclude that UKRI has a sound system of governance, risk management and internal control that supports the department's aims and objectives for 2020-21.

Remuneration and Staff Report

Board Chair and Board members except Chief Executive Officer and Chief Finance Officer

Remuneration Policy

The Chair and Board members receive a letter of appointment from the Department for Business, Energy and Industrial Strategy (BEIS).

They are not employees of UKRI, although remuneration is made through the UKRI payroll.

BEIS advises UKRI of the rates they are required to pay, and these are reviewed with each new appointment.

Board members may receive additional remuneration for attending advisory committees.

The Board Chair and Board Members are defined as Office Holders. They are neither employees nor civil servants.

Appointments are usually made for up to four years. In exceptional cases members may be offered the possibility of re-appointment which cannot exceed ten years in total.

Appointments are non-pensionable and there are no superannuation payments relating to the fees paid to them. There is no compensation for loss of office.

Remuneration – Audited Information

Total Remuneration of Board Membership

| Remuneration (£ per annum) | 2020-21 | 2019-20 |
|----------------------------|---------|---------|
| Board Chair | 28,000 | 28,000 |
| Board Members | 9,180 | 9,180 |

Board Honoraria – Audited Information

Board Membership

| Name | Period of appointment | | Remuneration | Remuneration |
|--|-----------------------|-------------|----------------|----------------|
| | From | To | £000's 2020-21 | £000's 2019-20 |
| Sir Mark Walport ¹ | 01 Apr 2018 | 28 Jun 2020 | ***** | ***** |
| Mike Blackburn ² | 11 Sep 2019 | 10 Mar 2020 | ***** | ***** |
| Ian Kenyon ³ | 01 Apr 2018 | 31 Jul 2019 | ***** | ***** |
| Sir John Kingman ⁴ | 01 Apr 2018 | 30 May 2021 | 25 - 30 | 25 - 30 |
| Sir Peter Bazalgette | 01 Apr 2018 | 24 Mar 2021 | 5 -10 | 5 - 10 |
| Lord John Browne of Madingley ⁵ | 01 Apr 2018 | 29 Oct 2021 | 0 | 0 |
| Professor Max Lu | 01 Apr 2018 | 24 Mar 2021 | 5 -10 | 5 -10 |
| Fiona Driscoll ⁶ | 01 Apr 2018 | 29 Oct 2021 | 10 -15 | 10 -15 |
| Professor Sir Leszek Borysiewicz | 01 Apr 2018 | 30 Oct 2022 | 5 -10 | 5 -10 |
| Sir Harpal Kumar ⁷ | 01 Apr 2018 | 01 Nov 2020 | 5 -10 | 5 -10 |
| Mustafa Suleyman ⁸ | 01 Apr 2018 | 29 Oct 2020 | 0 | 0 |
| Professor Julia Black | 01 Apr 2018 | 29 Oct 2021 | 10 -15 | 10 -15 |
| Professor Alice Gast | 01 Apr 2018 | 29 Oct 2019 | 0 | 5 -10 |
| Lord David Willetts | 01 Apr 2018 | 29 Oct 2021 | 5 -10 | 5 -10 |
| Vivienne Parry | 01 Apr 2018 | 04 May 2021 | 5 -10 | 5 -10 |
| Professor Sir Ian Diamond ⁹ | 01 Apr 2018 | 31 Oct 2021 | 0 | 0 |
| Dame Sally Davies ¹⁰ | 01 Apr 2018 | 30 Oct 2021 | 0 | 0 |
| Siobhan Peters ¹¹ | 29 Jun 2020 | | ***** | ***** |
| Professor Dame Ottoline Leyser ¹² | 29 Jun 2020 | 28 May 2025 | ***** | ***** |

Notes:

1. 2. 3. Remuneration disclosed in the Senior Staff Remuneration table.

4. Sir John is the Chair of UKRI.

5. Lord Browne declined to receive an honorarium.

6. Fiona Driscoll is the Chair of UKRI Audit, Risk, Assurance & Performance Committee.

7. Sir Harpal stepped down from his role as the UKRI Innovation Champion in November 2020, a role for which he receives a separate honorarium in addition to his UKRI Board membership honorarium.

John Fingleton is covering the UKRI Innovation Champion role vacated by Sir Harpal. John is Senior Independent Member of the Innovate UK Council. He does not receive an honorarium for this role. John will occupy this role on a temporary basis until appointment of the new Innovation Champion; the end date of his appointment is thus unknown.

8. Mustafa Suleyman declined to receive an honorarium.

9. Sir Ian has declined his honorarium from July 2018. From 29 October 2019 he was no longer formally a Board member but joined the meetings as an unpaid observer.

10. Dame Sally is not formally a member of the Board but joined meetings in a personal capacity. She takes no remuneration for this role. Dame Sally was a Civil Servant until 30 September 2019.

11. Siobhan Peters' remuneration is disclosed in the Senior Staff Remuneration table. She has an open-ended term of appointment to the Board linked to her role as UKRI CFO; whilst she remains in post, in line with the Higher Education and Research Act 2017, she remains a member of the UKRI Board.

12. Professor Dame Ottoline Leyser's remuneration is disclosed in the Senior Staff Remuneration table.

Chief Executive Officer, Chief Finance Officer and Executive Chairs

Ministerial appointments (CEO, CFO, and Executive Chairs) have their initial remuneration package, both the basic pay and the performance related pay element, agreed by the relevant BEIS minister.

The UKRI Nominations and Remuneration Committee provides advice and recommendations to BEIS as to the performance element of the pay package, changes in basic pay for existing role holders, and the package for new recruitment exercises. They will also review and oversee the expenses arrangements of these appointments. Inputs include scrutiny of performance, benchmarking, recruitment and retention issues, compliance with equality duties and overall efficiency and affordability.

This advice is exchanged between the Chair of UKRI and the BEIS Permanent Secretary, where the context of wider public sector pay policy and managing public money rules are relevant factors in decision making. The final decision as to the performance related pay elements of these ministerial appointees is taken by the BEIS Permanent Secretary.

When setting remuneration policy, the UKRI Nominations and Remuneration Committee reviews and has regard to pay and employment conditions across UKRI and the wider public sector, especially when determining annual salary increases. This will include the Senior Civil Service Pay Award practitioner guidance published annually by the Cabinet Office.

Other Senior Employees

The remuneration of other senior roles which existed before the formation of UKRI and transferred into UKRI on 1st April 2018 remained unchanged and with their pay arrangements protected.

The pay award date for all senior employees and Executive Chairs has been harmonised at 1st April from April 2020.

A harmonised performance management system was also introduced from this date.

Remuneration for senior roles is linked to job weight, and a minimum salary for Deputy Director equivalent posts has been introduced. The remuneration for new senior roles recruited into the MRC Institutes is in line with their legacy pay arrangements as agreed at the establishment of UKRI.

The role of the UKRI Nominations and Remuneration Committee is to ensure that remuneration arrangements support the strategic aims of UKRI and enable the recruitment, motivation and retention of senior staff, while complying with public sector pay policy and other requirements.

Senior Staff Remuneration Table

| Chief Executive & Directors | 2020-21 | | | | 2019-20 | | | |
|--|---------|---------|---------------------|---------|---------|---------|---------------------|---------|
| | Salary | Bonus * | Pension benefits ** | Total | Salary | Bonus * | Pension benefits ** | Total |
| | (£'000) | (£'000) | (£'000) | (£'000) | (£'000) | (£'000) | (£'000) | (£'000) |
| Sir Mark Walport ¹ Chief Executive UKRI | 40-45 | 5-10 | - | 85-90 | 170-175 | 35-40 | - | 170-175 |
| Ian Kenyon ² UKRI CFO | - | - | - | - | 45-50 | - | - | 45-50 |
| Mike Blackburn ³ UKRI CFO | 260-265 | - | - | 260-265 | 240-245 | - | - | 240-245 |
| Geoff Robins ⁴ UKRI Director of Transformation | - | - | - | - | 90-95 | - | - | 90-95 |
| Emma Lindsell ⁵ Executive Director of Strategy, Communications, Analysis & Governance (Job share) | 75-80 | 0-5 | 83 | 80-85 | 50-55 | - | 104 | 155-160 |
| Isobel Stephen ⁶ Executive Director of Strategy, Communications, Analysis & Governance (Job share) | 55-60 | 0-5 | 71 | 60-65 | 40-45 | - | 65 | 105-110 |
| Professor L Gladden ⁷ Exec Chair EPSRC | 115-120 | 5-10 | - | 125-130 | 115-120 | - | - | 115-120 |
| Professor M Welham Exec Chair BBSRC | 145-150 | - | 52 | 145-150 | 140-145 | - | 54 | 195-200 |
| Professor J Rubin ^A Exec Chair ESRC | 115-120 | - | 25 | 140-145 | 140-145 | 10-15 | 25 | 175-180 |
| Alison Park ⁹ Exec Chair ESRC | 25-30 | - | 11 | 40-45 | - | - | - | - |
| Dr Ian Campbell ¹⁰ Exec Chair IUK | 130-135 | - | 41 | 130-135 | 170-175 | 10-15 | 68 | 255-260 |
| Mike Biddle ¹¹ Exec Chair IUK | 35-40 | - | 48 | 40-45 | - | - | - | - |
| Simon Edmonds ¹¹ Exec Chair IUK | 45-50 | - | 44 | 55-60 | - | - | - | - |
| Professor F Watt ¹² Exec Chair MRC | 150-155 | - | 29 | 175-180 | 150-155 | - | 26 | 175-180 |
| Professor D Wingham ¹³ Exec Chair NERC | 145-150 | - | 50 | 145-150 | 150-155 | 10-15 | 56 | 230-235 |
| David Sweeney ¹⁴ Exec Chair RE | 135-140 | - | - | 135-140 | 130-135 | - | - | 130-135 |
| Professor M Thomson ¹⁵ Exec Chair STFC | 145-150 | - | 46 | 195-200 | 145-150 | 5-10 | 43 | 195-200 |
| Professor A Thompson ¹⁶ Exec Chair AHRC | 25-30 | - | 6 | 35-40 | 30-35 | 25-30 | 8 | 125-130 |
| Professor Dame Ottoline Leyser ¹⁷ Chief Executive UKRI | 165-170 | - | - | 165-170 | - | - | - | - |
| Siobhan Peters ¹⁸ UKRI CFO | 125-130 | - | 100 | 125-130 | - | - | - | - |
| Professor C Smith ¹⁹ Exec Chair AHRC | 85-90 | - | 15 | 85-90 | - | - | - | - |
| Tim Bianek ²⁰ UKRI Chief Operating Officer | 15-20 | - | 7 | 15-20 | - | - | - | - |

Notes:

1. Sir Mark's role as CEO was 88% of full-time. The FTE Salary was in the 195-200 banding. He opted out of the Pension scheme. Sir Mark left this role as of 26 June 2020.

During 2020-21, two bonuses were paid; one bonus in the banding 35-40 was paid relating to performance during the period February 2017 to February 2020 (included in bonus calculation for 2019-20) and a further bonus in the banding 5-10 was paid for the final five months of his tenure as UKRI CEO (included in bonus calculation for 2020-21). This was approved by the UKRI Nominations and Remuneration committee.

Sir Mark remained an employee of UKRI until 31 July 2020, having stepped down as CEO. This was to provide oversight of UKRI's COVID-19 work and to represent UKRI in cross-government initiatives. Sir Mark was no longer a member of the UKRI Board or Executive Committee during this time; therefore, remuneration for this position is not disclosed.

2. Ian Kenyon opted out of the Pension scheme. The FTE salary banding was 140-145. He left UKRI on 31 July 2019.
3. Mike Blackburn joined UKRI as CFO on 15 July 2019 and remained in this role until 26 June 2020. He was interim COO from 1 April 2020 to 5 February 2021. He was 0.8 FTE from 29 June 2020 until 5 February 2021. He was employed through an independent agency and does not belong to the available pension schemes. He was retained via a Crown Commercial Service Public Sector Resourcing framework contract. His role was assessed as being within scope of the IR35 regulations; consequently, Income tax and National Insurance deductions were made at source by the independent agency that directly employs him in compliance with the IR35 regulations. The FTE salary banding is 305-310.

Mike was succeeded in the interim CFO role by permanent appointment Siobhan Peters (see note 18) and succeeded in the interim COO role by permanent appointment Tim Bianek (see note 20).
4. Geoff Robins joined the Executive committee on 23 July 2019. He left UKRI on 27 March 2020. He opted out of the pension scheme. The FTE Salary Banding is 130-135.
5. Emma Lindsell joined UKRI on 5 August 2019 in a 65% job-share role. The FTE salary banding is 115-120.
6. Isobel Stephen joined UKRI on 27 August 2019 in a 60% job-share role. The FTE salary banding is 115-120.
7. Professor Gladden is an employee of the University of Cambridge and is on secondment to UKRI. The values shown above are amounts reimbursed (excl. Pension & NI Contributions) to the University of Cambridge from April 2020 to December 2020. VAT is payable on the total amount invoiced but is not included in the figures above. FTE salary banding for a complete year is 140-145.
8. Professor Rubin is an employee of King's College London and was on secondment to UKRI. The values shown above are the amounts reimbursed to King's College from April 20 to end of December 2020. VAT is payable on the total amount invoiced but is not included in the figures above. Prof. Rubin's secondment is 95% of full-time. FTE salary banding is 140. Professor Rubin left her role on 31 December 2020.
9. Professor Park is covering the ESRC Exec Chair in the interim.
10. Dr Ian Campbell left his role as Exec Chair IUK on 25 November 2020. During 2019-20, a bonus was paid in the banding 10-15 relating to performance in 2018-19 (not included in bonus calculation in table). During 2020-21, a bonus was paid relating to performance in 2019-20 (included in bonus calculation for 2019-20).

Dr Campbell's 2020-21 salary includes payment for leave accrued when he left UKRI. Dr Campbell's FTE salary banding was 170-175.
11. As of 1 December 2020 Mike Biddle and Simon Edmonds are covering the Exec Chair IUK role on an interim basis prior to recruitment of new Exec Chair IUK to replace Dr Ian Campbell. Stewart Miller and Louisa Simons are also covering this role; their remuneration is not disclosed as they are not members of the Executive Committee.
12. Professor Watt is an employee of King's College London and is on secondment to UKRI. The values shown above are the amounts reimbursed (excluding NI Contributions) to King's College from April 20 to December 2020. VAT is payable on the total amount invoiced but is not included in the figures above. Her secondment is 80% of full-time. FTE Salary banding for complete year is 185-190K.
13. Professor Wingham's 2019-20 salary includes arrears from 2018-19. Two bonuses were paid in 2019-20, one relating to the period 2017-18 and one relating to 2018-19.

14. David Sweeney has opted out of the Pension Scheme.
 15. Professor Thomson is an employee of the University of Cambridge and is on secondment to UKRI.
 16. Professor A Thompson was an employee of the University of Exeter and on secondment to UKRI. The values shown above are amounts reimbursed (excluding Pension and NI Contributions) to the University of Exeter from April 20 to August 2020. VAT is payable on the total amount invoiced but is not included in the figures above. The bonus value disclosed in 2019-20, is in relation to three performance years. Professor Thompson's secondment is 80% of full-time. The FTE Salary banding is 120-125. From Sept 2019 Professor Thompson moved to the University of Oxford, continuing as AHRC Exec Chair on a fixed consultancy fee representing 60% of full-time. Professor Thompson left the role as of 31 August 2020.
 17. Professor Dame Ottoline Leyser commenced the role of UKRI Chief Executive on 29 June 2020. Ottoline is an employee of University of Cambridge and on secondment to UKRI. FTE salary band is 215-220K.
 18. Siobhan Peters commenced the role of CFO on 29 June 2020. FTE salary band is 155-160K.
 19. Professor Christopher Smith commenced the role of AHRC Exec Chair on 1 September 2020. Christopher is an employee of University of St Andrews and on secondment to UKRI. FTE salary band is 140-145K.
 20. Tim Bianek commenced the role of Chief Operating Officer on 8 February 2021. FTE Salary banding is 115K-120K
- * Bonuses paid in the financial year 2020-21 relate to the performance year 2019-20, unless otherwise stated.
- ** The value of pension benefits accrued during the year is calculated as (the real increase in pension multiplied by 20) plus (the real increase in any lump sum) less (the contributions made by the individual). The real increases exclude increases due to inflation or any increase or decreases due to a transfer of pension rights. The pension benefit disclosure for secondees is not equivalent to the pension benefit disclosure of the other executive chairs; it is the re-imburement of the contributions UKRI makes to their employers in respect of the secondees' pension. Where no benefit is shown, UKRI makes no such contribution.

Salary and Allowances, Benefits in Kind and Bonuses

Salary paid in 2020-21 includes salary and any allowances. It does not include severance payments, reimbursement of expenses, employer pension contributions or the cash equivalent transfer value of pensions.

The monetary value of benefits in kind covers any benefits provided by the employer and treated by HM Revenue and Customs as a taxable emolument. There were no benefits in kind paid to any of the UKRI Executives in 2020-21 (Nil in 2019-20).

Decisions on whether to award non-consolidated performance awards to Directors are made by the CEO in conjunction with the UKRI Nominations and Remuneration Committee. Decisions are strictly performance based. They are made in accordance with Cabinet Office Guidance for the approval of senior pay document published in November 2018, and the Cabinet Office Senior Civil Service Pay Award Practitioner Guidance (Annual) as well as the annual Senior Salaries Review Body report and any guidance from HM Treasury, Cabinet Office or BEIS. Directors are awarded non-consolidated awards based on how well they achieved or exceeded the personal objectives given to them at the beginning of the appraisal period.

Performance awards for 2020-21 for Directors excluding Innovate UK were paid within 2020-21. Awards for Innovate UK will be paid in 2021-22 and will be included within next year's report.

Reporting bodies are required to disclose the ratio between the remuneration of the highest-paid director in their organisation and the median remuneration of the organisation's workforce.

Fair pay disclosure – Audited Information

The banded remuneration of the highest-paid director in UKRI in the financial year 2020-21 was £305,000 to £310,000. This was 8.10 times the median remuneration of the workforce (8.63 in 2019-20) which was £37,956 (£35,630 in 2019-20). In 2020-21, no employees received remuneration in excess of the highest-paid director. Remuneration ranged from £11,446 to £308,000 (£11,255 to £308,000 in 2019-20).

Senior staff pension table

| Chief Executive and Executive Chairs | Accrued pension at pension age at 31 March 2021 and related lump sum | Real increase in pension and related lump sum at pension age | CETV at 31 March 2021 | CETV at 31 March 2020 | Real increase in CETV | Accrued pension at pension age at 31 March 2020 and related lump sum | Real increase in pension and related lump sum at pension age | CETV at 31 March 2020 | CETV at 31 March 2019 | Real increase in CETV |
|--|---|--|--------------------------------|-----------------------|-----------------------|--|--|-----------------------------------|-----------------------|-----------------------|
| | £000 | £000 | £000 | £000 | £000 | £000 | £000 | £000 | £000 | £000 |
| | Emma Lindsell Executive Director of Strategy, Communications, Analysis & Governance (Jobshare) | 30-35 plus a lump sum of 70-75 | 2.5-5 plus a lump sum of 5-7.5 | 511 | 437 | 55 | 25-30 plus a lump sum of 65-70 | 2.5 -5 plus a lump sum of 10-12.5 | 437 | 357 |
| Isobel Stephen Executive Director of Strategy, Communications, Analysis & Governance (Jobshare) | 30-35 plus a lump sum of 65-70 | 2.5-5 plus a lump sum of 5-7.5 | 528 | 460 | 51 | 20-25 plus a lump sum of 40-45 | 2.5 -5 plus a lump sum of 5-7.5 | 460 | 294 | 44 |
| Professor Welham Exec Chair BBSRC | 25-30 | 2.5-5 | 387 | 326 | 37 | 20-25 | 2.5-5 | 326 | 264 | 38 |
| Dr Campbell Exec Chair IUK | 10-15 | 2.5-5 | 182 | 144 | 23 | 10-15 | 2-2.5 | 144 | 89 | 37 |
| Professor Wingham Exec Chair NERC | 30-35 | 2.5-5 | 560 | 484 | 44 | 25-30 | 2.5-5 | 484 | 406 | 47 |
| Mike Biddle Exec Chair IUK | 20-25 | 2.5-5 | 359 | 308 | 35 | - | - | - | - | - |
| Simon Edmonds Exec Chair IUK | 30-35 plus a lump sum of 100 - 105 | 0-2.5 plus a lump sum of 5 - 7.5 | 784 | 743 | 43 | - | - | - | - | - |
| Alison Park Exec Chair ESRC | 0-5 | 0-2.5 | 64 | 55 | 7 | - | - | - | - | - |
| Siobhan Peters UKRI CFO | 55-60 plus a lump sum of 35-40 | 5-7.5 plus a lump sum of 0-2.5 | 916 | 814 | 68 | - | - | - | - | - |
| Tim Bianek UKRI Chief Operating Officer | 0-5 | 0-2.5 | 5 | 0 | 4 | - | - | - | - | - |

Details of Pension Schemes

Most employees of UK Research and Innovation are members of one of three occupational pension schemes; RCPS, MRCPS and CSPS. These are all defined benefit schemes.

UKRI complies with auto-enrolment legislation by enrolling eligible employees into a qualifying occupational pension scheme. Most staff employed by UKRI are entered into the Civil Service Pension Scheme arrangements.

Staff who are employed at the MRC institutes in Cambridge, London and Oxford are enrolled in the MRC Pension Scheme. Staff who were previously employed by the BBSRC, AHRC, STFC, EPSRC, ESRC, NERC, Innovate UK, MRC or Research England, and who had their employment transferred to UKRI through a statutory staff Transfer Scheme on 1 April 2018, are entitled to remain in their pension scheme, including if they take up a new post on UKRI Terms and Conditions.

Members of relevant pension schemes as at 31 March 2021

| | |
|--------|-------|
| RCPS: | 3,769 |
| MRCPS: | 1,128 |
| CSPS: | 2,597 |

Research Councils' Pension Scheme (RCPS)

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 (PCSPS), 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 UKRI. The scheme is administered by the Joint Superannuation Service, with the associated grant-in-aid managed by UKRI. The scheme accounts are prepared by UKRI on behalf of the UKRI 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 4.6 and 8.05% depending on the scheme. The employer's contribution is agreed by the RCPS Management Board on the recommendation of the Government Actuary's Department (GAD) and is currently set at 26.0% of pensionable pay

RCPS Employee Contribution Rates for 2020-21

| Annualised Pensionable Earnings | Normal Member Contribution Rate (%) |
|---------------------------------|-------------------------------------|
| Up to £22,600 | 4.60 |
| £22,601 - £54,900 | 5.45 |
| £54,901 - £150,000 | 7.35 |
| £150,001 and above | 8.05 |

The employer's contribution to the RCPS for 2020-21 was £49.9 million (2019-20: £46.3 million).

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.

Formal actuarial valuations are used to determine employer and employee contribution rates. The most recent full actuarial valuation undertaken for RCPS was at 31 March 2018 and completed in 2020. The RCPS Management Board agreed to continue with an employer contribution rate of 26.0%.

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 2020-21 was £221,981 (2019-20: £311,202). The employer's 0.8% death in service Partnership contribution for 2020-21 was £2,387 (2019-20: £10,827).

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

Civil Service Pension Schemes

UKRI has a statutory requirement to participate in the Civil Service Pension Scheme (ref. Higher Education and Research Act 2017 Sch. 9 para. 8(6)). The Civil Service Pension arrangements comprise the Principal Civil Service Pension Scheme (PCSPS) and Alpha, a new scheme set up in April 2015. Generally, all new employees joining on UKRI Terms and Conditions are enrolled in the Alpha pension scheme.

Alpha provides benefits on a career average basis with a normal pension age equal to the member's State Pension Age (or 65 if higher). Before April 2015 civil servants were enrolled in the Principal Civil Service Pension Scheme (PCSPS). The PCSPS has four sections: three providing benefits on a final salary basis (classic, premium or classic plus) with a normal pension age of 60; and one, Nuvos, providing benefits on a career average basis with a normal pension age of 65.

These statutory arrangements are unfunded, with the cost of benefits met by monies voted by Parliament each year. Pensions payable under classic, premium, classic plus, Nuvos and Alpha are increased annually in line with Pensions Increase legislation.

Employee contributions are salary-related and range between 4.60 to 8.05% for members of premium, classic plus, Nuvos and Alpha.

Civil Service Employee Contribution Rates for 2020-21

| Annualised Pensionable Earnings | Normal Member Contribution Rate (%) |
|---------------------------------|-------------------------------------|
| Up to £22,600 | 4.60 |
| £22,601 - £54,900 | 5.45 |
| £54,901 - £150,000 | 7.35 |
| £150,001 and above | 8.05 |

The employer contribution rate for the 2020-21 period was between 26.6 and 30.3% depending on the employee's salary.

Benefits in classic accrue at the rate of 1/80th of final pensionable earnings for each year of service. In addition, a lump sum equivalent to three years' initial pension is payable on retirement. For premium, benefits accrue at the rate of 1/60th of final pensionable earnings for each year of service. Unlike classic, there is no automatic lump sum. Classic plus is essentially a hybrid with benefits for service before 1 October 2002 calculated broadly as per classic and benefits for service from October 2002 worked out as in premium. In Nuvos a member builds up a pension based on their pensionable earnings during their period of scheme membership. At the end of the scheme year (31 March) the member's earned pension account is credited with 2.3% of their pensionable earnings in that scheme year and the accrued pension is uprated in line with Pensions Increase legislation. Benefits in alpha build up in a similar way to Nuvos, except that the accrual rate is 2.32%. In all cases members may opt to give up (commute) pension for a lump sum up to the limits set by the Finance Act 2004.

The partnership pension account is a stakeholder pension arrangement. The employer makes a basic contribution of between 8 and 14.75%, depending on the age of the member, into a stakeholder pension product chosen by the employee from a panel of providers. The employee does not have to contribute, but where they do make contributions, the employer will match these up to a limit of 3% of pensionable salary in addition to the employer's basic contribution. During 2020-21, employer contributions of £183,752 (2019-20: £121,519) were payable to partnership pension providers. Employers also contribute a further 0.5% of pensionable salary to cover the cost of centrally provided risk benefit cover for death in service and ill health retirement, referred to as mini Accruing Superannuation Liability Charges (mini ASLCs); these totaled £18,274 for 2020-21 (2019-20: £4,285).

The accrued pension quoted is the pension the member is entitled to receive when they reach their scheme 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 60 for members of classic, premium and classic plus, 65 for members of Nuvos, and the higher of 65 or State Pension Age for members of Alpha.

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 60 for members of classic, premium and classic plus, 65 for members of Nuvos, and the higher of 65 or State Pension Age for members of alpha. (The pension figures quoted for officials show pension earned in PCSPS or alpha – as appropriate. Where the official has benefits in both the PCSPS and alpha the figure quoted is the combined value of their benefits in the two schemes but note that part of that pension may be payable from different ages.)

Further details about the Civil Service pension arrangements can be found at www.civilservicepensionscheme.org.uk

During 2020-21, employer contributions of £21,014,687 (£11,794,842 in 2019-20) were payable to the Scheme at one of four rates in the range 26.6% to 30.3% of pensionable earnings, based on salary bands.

Other Pension Schemes

UKRI also paid contributions during the year to other multi-employer pension schemes for specific groups of employees. These schemes are:

- Principal Non-Industrial Superannuation Scheme (PNISS) of the United Kingdom Atomic Energy Authority (7 employees); and
- National Employment Savings Trust (NEST), the Government's workplace pension scheme (49 employees).

Cash Equivalent Transfer Value

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme.

A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme.

The figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme. They also include any additional pension benefit accrued to the member as a result of their purchasing additional years of pension service or buying additional pension benefits at their own cost. CETVs are worked out in accordance with The Occupational Pension Schemes (Transfer Values) (Amendment) Regulations 2008 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 the Value of the CETV

This reflects the increase in CETV that is funded by the employer. It does not include the increase in accrued pension due to inflation or 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.

Medical Research Council Pension Scheme (MRCPS)

Details of the Medical Research Council Pension Scheme are disclosed in Note 10 of the Financial Statements.

The MRC operates a funded pension scheme (MRCPS) providing benefits based on service and final pensionable pay at the normal retirement age of 65. The scheme is a defined benefit scheme that prepares its own scheme statements. Benefits accrue at the rate of 1/80th of pensionable salary for each year of service. In addition, a lump sum equivalent to three years' pension is payable on retirement. Members pay contributions of between 6.0% and 6.5% pensionable earnings to the Scheme.

Following the transfer of MRC research units and employees to universities, a University section was set up to account for the obligations to individuals that remain in the MRCPS. During the period obligations of £6.9m were recognised under Section 75 (S.75) of the 1995 Pensions Act in respect of liabilities of transferred employees; the University section, has been set up within MRCPS to manage S.75 liabilities. These costs are reflected in the valuation of the pension scheme.

The required MRCPS contribution rate is assessed every three years in accordance with advice of the Government Actuary. The latest actuarial assessment of the MRCPS was at 31 December 2019; showed a surplus of £230.9m (2016 valuation £160.3m) and the market value of the assets of the MRCPS was £1,647m (2016: £1,406m), an ongoing funding level of 116% (2016 valuation 113%). The actuarial value of the assets was sufficient to cover 116% of the benefits that had accrued to members after allowing for expected future increases in earnings. Triennial valuations are conducted under the Pensions Act 2004 on a scheme specific funding basis. The present MRCPS employers' contribution rate remained at 15% in 2020-21 (2019-20: 15%).

The contributions due to the scheme are set out in the schedule of contributions for each section. The most recent schedules of contributions were signed on 21 December 2020 and are due to be reviewed following the next actuarial valuation of the scheme which is due to be carried out as at 31 December 2022.

The following payments are due in 2021-22:

MRC Section

By the members: 6.5% of pensionable pay

By MRC: 16.0% of pensionable pay

By other employers: 16.9% of pensionable pay

The total contribution expected to be paid into the MRC section in 2021-22 is £12m.

University Section

By the members: 6.5% of pensionable pay

By the universities: 16.9% of pensionable pay

By MRC: 27.1% of pensionable pay

The total contribution expected to be paid into the university section in 2021-22 is £12m.

As at 31 December 2019 the average maturity of the scheme as a whole was around 20 years.

The valuation used for IAS 19 disclosures has been based on the data for the most recent actuarial valuations as at 31 December 2019, and updated to take account of the requirements of IAS 19 in order to assess the liabilities of the scheme at 31 March 2021. The mortality assumptions included within the figures are that male and female members who retire at typical ages will live to approximately age 88 and 89 respectively.

Staff Report

Staff Numbers – number of persons employed at 31 March 2021 – Audited Information

| | 2020-21 | | 2019-20 | |
|----------------------------------|--------------|--------------|--------------|--------------|
| | Headcount | FTE | Headcount | FTE |
| Permanent & Fixed Term Employees | 7,793 | 7,472 | 7,176 | 6,820 |
| Temporary & Contract Staff | 377 | 271 | 229 | 155 |
| Secondments | 80 | 60 | 58 | 53 |
| Total number of staff | 8,250 | 7,803 | 7,463 | 7,028 |

Staff Related Costs – Audited Information

| | 2020-21 | | | 2019-20 |
|---|---------------------------------|----------------------|----------------|----------------|
| | Permanently employed staff £000 | Temporary Staff £000 | Total £000 | Total £000 |
| Wages and Salaries | 331,177 | 15,770 | 346,947 | 307,443 |
| Social Security costs | 33,735 | - | 33,735 | 32,714 |
| Other Pension costs | 89,761 | - | 89,761 | 91,384 |
| Sub Total | 454,673 | 15,770 | 470,443 | 431,541 |
| Less recoveries in respect of outward secondments | (214) | - | (214) | (141) |
| | 454,459 | 15,770 | 470,229 | 431,400 |

Reasons for FTE growth include:

- growth in delivery teams to support expansion of existing programmes, such as the next phase of the Antarctic Modernisation Infrastructure Programme, as well as increases in demand resulting from COVID-19;
- developing a new commercial operating model to support specialist procurement, as well as developing capacity in other corporate functions;
- developing change and project delivery capacity to support UKRI transformation activity;
- reduced staff turnover, resulting in fewer vacancies.

UKRI recognised an increase of £10.1m in accrued employee benefits (£3.6m was equivalent figure for 2019-20); annual leave owed to permanent staff significantly increased during the year as, following government guidance, UKRI increased the allowance for carried over leave from 10 days to 20 days as a result of the pandemic.

Bonuses paid to staff in 2020-21 increased by £2.4m to £3.3m; this was the first year of operation of UKRI's in-year award scheme used to recognise staff who demonstrate UKRI's values through exceptional performance and behaviours. The bonus pot is agreed through the annual pay remit, and UKRI bonus spend has remained within the approved envelope of 1.83%.

Spend on contingent labour increased by £2.7m to £15.8m during 2020-21. Increases were driven by change activities, supporting UKRI's transformation agenda.

Sickness Absence

UKRI HR and management monitor employee sick absences on an on-going basis with sickness absences followed up by a return to work interview in line with UKRI Sickness Absence Policy. Short-term and long-term absences are managed on a case-by-case basis with appropriate support from an Occupational Health Assessor. Sickness attributed to COVID-19 is also separately communicated to BEIS and monitored through a Bronze, Silver, Gold command structure. Sickness across all reasons significantly decreased in 2020-21. This has been attributed to the protective effect lockdown conditions appear to have had on transmission of minor illnesses and also flexible working conditions potentially enabling people to manage any health issues without taking time off work.

| Sickness Absence | 2020-21 | | 2019-20 |
|---|---------|--------------|--------------|
| | Days | Working Days | Working Days |
| Total days of absence | 30,088 | 24,090 | 40,757 |
| Frequency of absences lasting longer than 28 days | 246 | 246 | 355 |
| Total days of long-term absence | 14,894 | 10,832 | 18,671 |
| Average days of sick absence per person in UKRI | 4 | 3 | 5 |

Staff Numbers by Gender

| Pay Bands | Head Count | | | | FTE | | | |
|-------------------------|--------------|--------------|------------|--------------|--------------|--------------|------------|--------------|
| | Male | Female | Unknown | Total | Male | Female | Unknown | Total |
| Directors (X&Y) | 75 | 45 | - | 120 | 69 | 43 | - | 112 |
| Senior Managers (G & H) | 329 | 175 | - | 504 | 314 | 166 | - | 480 |
| Other Employees (A-F) | 3,987 | 3,485 | 154 | 7,626 | 3,821 | 3,241 | 149 | 7,211 |
| Total | 4,391 | 3,705 | 154 | 8,250 | 4,204 | 3,450 | 149 | 7,803 |

Staff Numbers by Ethnicity

| Ethnic Group | Year End Number of Employees | Percentage |
|------------------------|------------------------------|-------------|
| Ethnic Minorities | 583 | 7.1% |
| White | 5,620 | 68.1% |
| Ethnicity Withheld | 741 | 9.0% |
| Ethnicity Not Reported | 1,306 | 15.8% |
| Total | 8,250 | 100% |

Staff Numbers by Disability

| Disability | Year End Number of Employees | Percentage |
|----------------|------------------------------|-------------|
| Yes | 175 | 2.1% |
| No | 8,069 | 97.8% |
| Not disclosed* | 6 | 0.1% |
| Total | 8,250 | 100% |

Disability is reported by exception, Not Disclosed* indicates where Employees have explicitly opted out by indicating a 'prefer not to say' or similar option on equality monitoring forms.

Reporting of Civil Service and other Comprehensive Schemes – Exit Packages

Audited Information

Redundancy 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 the provisions of the Medical Research Council Redundancy Compensation Scheme. Exit packages this year increased due to internal restructures at the British Antarctic Survey and British Geological Survey, including changes to the mariner workforce in preparation for the launch of the RSS Sir David Attenborough. Redundancies from the Medical Research Council are primarily caused by the closure of one of its units, along with a combination of changes to research programmes and termination of fixed term contracts.

| Exit package cost band | Number of compulsory redundancies | | Number of other departures agreed | | Total no of exit packages by cost band | |
|---|-----------------------------------|----------------|-----------------------------------|------------------|--|------------------|
| | 2020-21 | 2019-20 | 2020-21 | 2019-20 | 2020-21 | 2019-20 |
| <£10k | 10 | 2 | 22 | 7 | 32 | 9 |
| £10k - £25k | 18 | 2 | 26 | 23 | 44 | 25 |
| £25k - £50k | 13 | 3 | 28 | 12 | 41 | 15 |
| £50k - £100k | 3 | 3 | 30 | 7 | 33 | 10 |
| £100k - £150k | - | - | 7 | - | 7 | - |
| Total no by type | 44 | 10 | 113 | 49 | 157 | 59 |
| Total value of exit packages accounted for in year £ | 1,007,170 | 355,471 | 4,940,602 | 1,387,354 | 5,947,772 | 1,742,825 |

Health and Safety

The UKRI Health and Safety (H&S) management system has continued to mature over the financial year. We have maintained our federated approach to H&S management within UKRI; individual research council Executive Chairs have the delegated authority to put in place H&S management arrangements, proportionate to their council's hazard profile. These arrangements operate within an overarching UKRI H&S policy and arrangements established, maintained and developed by the corporate H&S function.

Specific achievements for the year include:

- the UKRI H&S policy has been reviewed, revised and republished, Executive Chair letters of delegation now include direct reference to the H&S policy;
- the UKRI H&S Strategy, which includes goals and trial metrics for the forthcoming financial year, has been approved and published;
- a project to review and strengthen the H&S arrangements across the office estate commenced and has completed its review and analysis phase and will be implementing its recommendations in the forthcoming financial year, in alignment with other workplace change projects;
- the recommendations made by a GIAA audit of UKRI H&S Assurance in 2019 have now all been implemented;
- a general H&S awareness training module aimed primarily at those on the office estate has progressed to an advanced state in readiness for roll-out in 2021 as part of the Universal Learning project.

The health, safety and welfare of our people has been at the forefront of our response to the COVID-19 pandemic. The H&S element of this has encompassed continued access to online display screen equipment training and assessment, including specialist assessments and reasonable adjustments; advice on COVID-secure arrangements and their implementation; and completion of specific and template COVID-19 risk assessments.

Performance

Injury and non-injury incident data from across UKRI is consolidated in the quarterly H&S reports to the Executive Committee. Both injury and non-injury trends have declined over the FY due to lower site occupancy levels resulting from COVID-19, with an annual injury rate of 21.0 per 1,000 staff and non-injury rate of 84.4 per 1000 staff. The clear majority

of incidents are of a minor nature (85% and 79% respectively). Five incidents were reported to the Health and Safety Executive and five maritime incidents to the Marine Accident Investigation Board who are, as a result, investigating a lifeboat incident which resulted in three individuals receiving minor injuries on the RSS Sir David Attenborough. External inspections of COVID-19 arrangements at our sites have achieved satisfactory outcomes but an HSE inspection of radiological protection arrangements at the MRC Harwell Institute identified some material breaches of the Ionising Regulations 2017 relating to the adequacy of the risk assessment record which have been rectified; there have been no prosecutions due to H&S failings.

Expenditure on Consultancy

Expenditure on consultancy in 2020-21 was £560,317 (2019-20: £23,596). Year-on-year increases in consultancy spend relate to support for changes to Polaris House Head Office, construction and maintenance of science estate, Innovate UK competitions and knowledge transfer activity and UKRI's transformation agenda.

Expenditure on Contingent Labour

During 2020-21, £15.8 million was spent on contingent labour (2019-20: £13.1 million). Year on year increases largely relate to expenditure on UKRI's transformation agenda.

Off Payroll Engagements (more than £245 per day and longer than 6 months)

All payroll workers at UKRI 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 the scope of the intermediaries legislation IR35. This circumstance currently applies to 40 off-payroll workers working through a limited company.

| | Number |
|--|--------|
| Number of existing engagements as of 31 March 2021 | 112 |
| Of which, the number that have existed: | |
| For less than one year at the time of reporting | 86 |
| For between one and two years at the time of reporting | 18 |
| For between 2 and 3 years at the time of reporting | 2 |
| For between 3 and 4 years at the time of reporting | 2 |
| For greater than 4 years at time of reporting | 4 |

| | Number |
|--|--------|
| Number of new engagements, or those that reached six months in duration between 1 April 2020 and 31 March 2021 | 160* |
| No. assessed as caught by IR35 | 29 |
| No. assessed as not caught by IR35 | 40 |
| No. engaged directly (via PSC contracted to department) and are on the departmental payroll | 0 |
| No. of engagements reassessed for consistency / assurance purposes during the year | 75 |
| No. of engagements that saw a change to IR35 status following the consistency review | 2 |

*Not subject to off-payroll legislation

For any off-payroll engagements of board members, and/or senior officials with significant financial responsibility, between 1 April 2020 and 31 March 2021:

| | Number |
|--|--------|
| Number of off-payroll engagements of board members, and/or senior officials with significant financial responsibility, during the financial year | 1 |
| Total number of individuals on payroll and off-payroll who have been deemed "board members, and/or senior officials with significant financial responsibility" during the financial year | 25* |

*Includes all UKRI Board and Exec Co Members

Employee Engagement

People are central to the success of UKRI, and the organisation is working to establish a range of communications and engagement channels to ensure staff understand the importance of what they do and can connect their contributions to the success of UKRI's strategic objectives. We are committed to effective engagement with staff and taking forward their suggestions and ideas. We do this through:

- day to day leadership and management at every level in the organisation;
- an effective partnership with recognised Trade Unions, through a Joint National Consultative Committee, who represent staff on a range of matters including pay, benefits, pensions and organisational change;
- regular updates to staff by senior executives which are accessible by all staff irrespective of their working location. This provides staff with updates on corporate initiatives and also provides the opportunity for employees to ask challenging questions of the executive;
- the "Source" providing a central online portal for all UKRI staff covering news, events, and resources; complemented by additional material for each constituent Council;
- launch of the 'Yammer' platform facilitating networking and social interaction among UKRI staff.

Staff Policies

UKRI has implemented a revised HR policy framework. This ensures that HR policies are easy to use and can be reviewed and updated through an established consultation and agreement protocol with Trades Unions. UKRI is at the early stage of reviewing several key policies and procedures for example the Transgender Policy and the Bullying and Harassment to ensure that our HR processes are more inclusive and support our staff.

Learning and Development

Learning and development opportunities are available to all UKRI employees, covering core skills, compliance training, leadership and management development, vocational training, apprenticeships and specialist skills.

Wellbeing

UKRI recognises that there is a correlation between wellbeing (including physical health and mental wellbeing) at work and job performance including attendance. UKRI has identified a number of co-ordinated initiatives across UKRI that employees can access and participate in. In light of the Coronavirus pandemic and work from home measures UKRI has conducted several wellbeing surveys on employees, primarily focussed on office-based employees. Good uptake and repetition of key questions demonstrated an improvement in wellbeing despite the challenges faced over the course of 2021. These improvements were attributed to UKRI wide interventions which included sessions on 'Psychology of Remote Working', promotion of support groups and welfare services and strong communication and reassurance from Senior leaders on wellbeing matters. This is a maturing area for UKRI and by the end of 2022 we will have a strategy in place to formally signal our commitment in this space.

Equality, diversity and inclusion (EDI)

UKRI has pledged to identify barriers and challenges to equality, diversity and inclusion, build knowledge of what works to improve outcomes in this area, and support the development and implementation of effective practices across the sector and internally for our own staff. UKRI holds Disability Confident Employer status, which is awarded to employers who have made a commitment to employ, keep and develop the abilities of disabled people. We continue to publish our Gender Pay Gap report alongside longer term plans to address pay gaps. Our institutes and centres continue their own EDI programmes, primarily but not exclusively focused on the participation of women in science.

Trade Unions

UKRI has a recognition agreement with the following Trades Union: The British Medical Association (BMA), The FDA, Prospect, The Public and Commercial Services Union (PCS), Unite the Union (Unite), The University and College Union (UCU), Nautilus International (Nautilus), and The Rail, Maritime and Transport Union (RMT). UKRI engages with unions through a Joint Negotiation and Consultative Committee at an organisational level, Local Joint Consultative Committees at some sites, and Joint Council Consultative Committees at Council level.

The following tables are provided under section 172A of the Trade Union and Labour Relations (Consolidation) Act 1992 in connection with the imposition of requirements on public authorities to publish information on facilities time taken by trade union officials.

Trade Union Facility Time Report 2020-21

| No employees | FT equivalent |
|---|---------------|
| 31 | 29.2 |
| %time | |
| 0 - 0.9% | 8 |
| 1 - 50% | 23 |
| 51 - 99% | - |
| 100% | - |
| Total | 31 |
| Total cost facility time £ | 53,882 |
| Total pay bill £'000 | 467,462 |
| % of total pay bill | 0.012% |
| (Total time spent on TU activities / total facility time hours) x 100 | 4.8% |

During 2020-21 Trade Union Representatives have been recording their facilities time using the centralised absence booking system, allowing a simple overview of the number of representatives and the time that they are taking for their union duties to ensure compliance with the terms of the recognition agreement.

Senior Civil Servant Pay Structure

The pay bands for Senior Civil Servants (SCS) equivalent as of 31 March 2021 are as follows:

| Minimum (£) | Maximum (£) | Number of Staff* |
|-------------|-------------|------------------|
| £50,001 | £60,000 | 0 |
| £60,001 | £70,000 | 0 |
| £70,001 | £80,000 | 7 |
| £80,001 | £90,000 | 18 |
| £90,001 | £100,000 | 38 |
| £100,001 | £110,000 | 4 |
| £110,000 | £120,000 | 7 |
| £120,001 | £130,000 | 7 |
| £130,001 | £140,000 | 4 |
| £140,001 | £150,000 | 3 |
| £150,001 | £160,000 | 1 |
| £160,001 | £170,000 | 0 |
| £170,001 | £180,000 | 0 |
| £180,001 | £190,000 | 0 |
| £190,001 | £200,000 | 0 |
| £200,001 | - | 1 |

*Includes UKRI staff on payroll and those paid via an agency at Band H and above. Does not include those on secondment to UKRI or staff in research Centres, Institutes or National Labs.

SCS equivalent pay has been assumed based on organisation hierarchy matching the Chief Executive, Executive Chairs and Directors and their direct reports to SCS grades.

Parliamentary Accountability and Audit Report

Losses and Special Payments – Audited Information

UKRI had one transaction over the reporting threshold classified within losses and special payments in the financial year 2020-21 (2019-20: nil). This loss (£322,785) pertained to specialist hydraulic equipment originally intended for the Halley VI Antarctic Base; the equipment was discovered to be unsuitable for use after transportation to the Antarctic and was left in situ when Halley VI was relocated.

The total losses and special payments incurred by UKRI in the year were £615,383 (2019-20: £300,000).

Remote Contingent Liabilities – Audited Information

In addition to contingent liabilities reported within the meaning of IAS 37, UKRI 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.

UKRI has one remote contingent liability as at 31 March 2021.

Through STFC, UKRI collaborates with 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 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.

Audit Fees – Audited Information

The cost of the external audit for UKRI was £475,000 (2019-20: £450,000), the statutory audit fee for STFC Innovations Ltd (SIL) was £18,900 (2019-20: £15,000) and the statutory audit fee for Innovate UK Loans Limited was £98,000 (2019-20: £96,000). During the year £8,400 was also paid for the statutory audit of those predecessor bodies not closed at 31 March 2020 and £8,400 has been accrued for the statutory audit of one predecessor body not closed at 31 March 2021.

No remuneration was paid to the external auditors in respect of non-audit work in 2020-21 (2019-20: £nil).

Fees and Charges – Audited Information

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.

Disclosure does not include recovery from other bodies to cover direct costs of grants paid from programmes funded jointly with other organisations.

We have identified two material items to which disclosure requirements apply in 2020-21.

STFC – Other income

Programme delivery, scientific facilities, goods and services are offered to European Union users, other government departments, commercial users and external users.

The default position for facilities, goods and services provided is that users are charged a cost based on direct operating costs and annual quantity of access, with an allowance for overheads to achieve full economic cost recovery.

Prices for facilities, goods and services provided by STFC are calculated to differentiate between the type of service and access charged for.

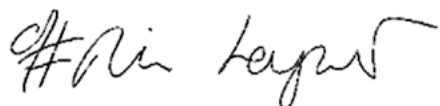
Innovate UK – programme delivery recharge

Innovate UK recharged Other Government Departments to recover the costs arising from evaluation, assessment and monitoring of grants issued to meet the common policy objectives of UKRI and relevant Other Government Departments and EU grant awarders.

Agreements with Other Government Departments relating to revenue seek to cover actually incurred direct costs only, either by direct recharge of costs incurred retrospectively or via a formula contribution to direct costs; there is no use of standard unit costs to calculate charges.

| Income item | £ | Description |
|-----------------------------------|-------------|---|
| STFC – Other income | £23,993,284 | Charged for facilities and goods & services |
| IUK – programme delivery recharge | £6,024,824 | Recharges for grant delivery costs |

There was no subsidy or overcharging arising from provisions of relevant facilities, goods and services.



Dame Ottoline Leyser
Chief Executive and Accounting Officer

13th July 2021

THE CERTIFICATE AND REPORT OF THE COMPTROLLER AND AUDITOR GENERAL TO THE HOUSES OF PARLIAMENT

Opinion on financial statements

I certify that I have audited the financial statements of United Kingdom Research and Innovation and its group for the year ended 31 March 2021 under the Higher Education and Research Act 2017. The financial statements comprise: 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. The financial reporting framework that has been applied in their preparation is applicable law and International Accounting Standards as interpreted by HM Treasury's Government Financial Reporting Manual.

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 United Kingdom Research and Innovation's affairs as at 31 March 2021 and of the group's and the parent's net expenditure for the year then ended;
- have been properly prepared in accordance with the Higher Education and Research Act 2017 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 for opinions

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK), applicable law 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 2019. I have also elected to apply the ethical standards relevant to listed entities. I am independent of United Kingdom Research and Innovation in accordance with the ethical requirements that are relevant to my audit of 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.

Conclusions relating to going concern

In auditing the financial statements, I have concluded that United Kingdom Research and Innovation's use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work I have performed, I have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the United Kingdom Research and Innovation's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

My responsibilities and the responsibilities of United Kingdom Research and Innovation and the Accounting Officer with respect to going concern are described in the relevant sections of this certificate.

The going concern basis of accounting for United Kingdom Research and Innovation is adopted in consideration of the requirements set out in applicable law and International Accounting Standards as interpreted by HM Treasury's

Government Financial Reporting Manual, which require entities to adopt the going concern basis of accounting in the preparation of the financial statements where it is anticipated that the services which they provide will continue into the future.

Other Information

The other information comprises information included in the annual report, but does not include the parts of the Accountability Report described in that report as having been audited, the financial statements and my auditor's certificate thereon. United Kingdom Research and Innovation and the Accounting Officer is responsible for the other information. My opinion on the financial statements does not cover the other information and except to the extent otherwise explicitly stated in my certificate, 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 I identify such material inconsistencies or apparent material misstatements, I am required to determine whether this gives rise to a material misstatement in the financial statements themselves. 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, based on the work undertaken in the course of the audit:

- the parts of the Accountability Report to be audited have been properly prepared in accordance with Secretary of State directions made under the Higher Education and Research Act 2017; and
- the information given in the Performance and Accountability Reports for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which I report by exception

In the light of the knowledge and understanding of United Kingdom Research and Innovation and its environment obtained in the course of the audit, I have not identified material misstatements in the Performance and Accountability reports. 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
- certain disclosures of remuneration specified by HM Treasury's Government Financial Reporting Manual are not made; 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.

Responsibilities of United Kingdom Research and Innovation and the Accounting Officer for the financial statements

As explained more fully in the Statement of Accounting Officer's Responsibilities, United Kingdom Research and Innovation and the Accounting Officer, is responsible for:

- the preparation of the financial statements in accordance with the applicable financial reporting framework and for being satisfied that they give a true and fair view;
- internal controls as United Kingdom Research and Innovation and the Accounting Officer determines is necessary to enable the preparation of financial statement to be free from material misstatement, whether due to fraud or error.

- assessing the United Kingdom Research and Innovation's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless United Kingdom Research and Innovation and the Accounting Officer anticipates that the services provided by United Kingdom Research and Innovation will not continue to be provided in the future.

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 Higher Education and Research Act 2017.

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue a certificate that includes my opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with ISAs (UK) 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.

I design procedures in line with my responsibilities, outlined above, to detect material misstatements in respect of non-compliance with laws and regulations, including fraud.

My procedures included the following:

- Inquiring of management, United Kingdom Research and Innovation's head of internal audit and those charged with governance, including obtaining and reviewing supporting documentation relating to United Kingdom Research and Innovation's policies and procedures relating to:
 - identifying, evaluating and complying with laws and regulations and whether they were aware of any instances of non-compliance;
 - detecting and responding to the risks of fraud and whether they have knowledge of any actual, suspected or alleged fraud; and
 - the internal controls established to mitigate risks related to fraud or non-compliance with laws and regulations including the Group's controls relating to the Higher Education and Research Act 2017 and Managing Public Money;
- discussing among the engagement team and involving relevant internal and external specialists, including Pensions where specialist expertise was engaged on the audit: regarding how and where fraud might occur in the financial statements and any potential indicators of fraud. As part of this discussion, I identified potential for fraud in the following areas: revenue recognition, posting of unusual journals and grant expenditures; and
- obtaining an understanding of United Kingdom Research and Innovation and Group's framework of authority as well as other legal and regulatory frameworks that United Kingdom Research and Innovation and Group operates in, focusing on those laws and regulations that had a direct effect on the financial statements or that had a fundamental effect on the operations of United Kingdom Research and Innovation and Group. The key laws and regulations I considered in this context included the Higher Education and Research Act 2017, Managing Public Money, Employment Law, tax Legislation, and Pensions legislation.

In addition to the above, my procedures to respond to identified risks included the following:

- reviewing the financial statement disclosures and testing to supporting documentation to assess compliance with relevant laws and regulations discussed above;
- enquiring of management, the Audit Committee and in-house legal counsel concerning actual and potential litigation and claims;
- reading minutes of meetings of those charged with governance and the Board;
- in addressing the risk of fraud through management override of controls, testing the appropriateness of journal entries and other adjustments; assessing whether the judgements made in making accounting estimates are indicative of a potential bias; and evaluating the business rationale of any significant transactions that are unusual or outside the normal course of business; and

■ enquiring of and reviewing the reports of in-house Funding Assurance teams.

I also communicated relevant identified laws and regulations and potential fraud risks to all engagement team members including internal specialists and significant component audit teams and remained alert to any indications of fraud or non-compliance with laws and regulations throughout the audit.

A further description of my responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of my certificate.

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.

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.

Report

I have no observations to make on these financial statements.

Gareth Davies

Date 16th July 2021

Comptroller and Auditor General

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



4. Financial Statements

Consolidated Statement of Comprehensive Net Expenditure

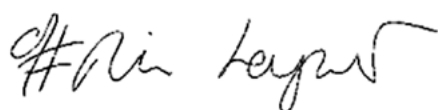
| | Note | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|--|------|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Total operating income | 3 | (355,429) | (368,700) | (347,522) | (348,129) |
| Staff costs | 4 | 473,699 | 476,680 | 432,496 | 433,362 |
| Purchase of Goods and services | 5.1 | 628,304 | 630,430 | 589,822 | 590,443 |
| Depreciation and impairment charges | 5.2 | 182,489 | 187,111 | 188,669 | 190,659 |
| Research and Innovation | 5.3 | 7,837,264 | 7,837,736 | 6,800,666 | 6,801,120 |
| Provision expense | 5.4 | 13,574 | 18,533 | 73,670 | 73,670 |
| Other operating expenditure | 5.5 | 26,579 | 21,291 | 36,732 | 36,732 |
| Notional service charge | | - | - | 24,517 | 24,517 |
| | | 9,161,909 | 9,171,781 | 8,146,572 | 8,150,503 |
| Net operating expenditure | | 8,806,480 | 8,803,081 | 7,799,050 | 7,802,374 |
| Taxation | 6 | 6,509 | 5,929 | 741 | 312 |
| Finance income | | (925) | (3,846) | (157) | (2,290) |
| Finance expenditure | | (1,339) | 39 | (1,800) | (1,800) |
| Net expenditure for the period | | 8,810,725 | 8,805,203 | 7,797,834 | 7,798,596 |
| Other comprehensive expenditure | | | | | |
| Net (gain) on revaluation of property, plant and equipment | | (6,855) | (6,855) | (54,555) | (54,555) |
| Net (gain) on revaluation of intangible assets | | (54,469) | (54,469) | (13,073) | (13,073) |
| Net loss/(gain) on revaluation of investments | | 9,762 | 8,491 | (13,621) | (15,493) |
| Net movement in cash flow hedges | | - | - | (11,770) | (11,770) |
| Actuarial (gain) on defined benefit pension plan | | (146,055) | (146,055) | (65,794) | (65,794) |
| Total net comprehensive expenditure for the period | | 8,613,108 | 8,606,315 | 7,639,021 | 7,637,911 |

The notes on pages 147 to 183 form part of these accounts

Consolidated Statement of Financial Position

| | Note | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|--|------|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Non-current assets | | | | | |
| Property, plant and equipment | 7 | 2,696,792 | 2,696,792 | 2,513,380 | 2,513,380 |
| Intangible assets | 8 | 137,249 | 137,249 | 118,086 | 118,086 |
| Investment property | | 4,300 | 4,300 | 4,270 | 4,270 |
| Financial assets | 9 | 734,264 | 807,571 | 747,796 | 784,203 |
| Pension asset | 10 | 243,661 | 243,661 | 98,692 | 98,692 |
| Trade and other receivables | 11 | 95,035 | 10,422 | 50,311 | 10,561 |
| | | 3,911,301 | 3,899,995 | 3,532,535 | 3,529,192 |
| Current assets | | | | | |
| Assets held for sale | | 5,182 | 5,182 | 5,183 | 5,183 |
| Trade and other receivables | 11 | 648,821 | 643,952 | 381,743 | 375,735 |
| Cash and cash equivalents | 12 | 231,851 | 259,458 | 204,368 | 207,934 |
| | | 885,854 | 908,592 | 591,294 | 588,852 |
| Total assets | | 4,797,155 | 4,808,587 | 4,123,829 | 4,118,044 |
| Current liabilities | | | | | |
| Trade and other payables | 13 | (1,382,004) | (1,388,408) | (1,068,739) | (1,069,682) |
| Provisions | 14 | (4,760) | (9,723) | (7,869) | (7,869) |
| | | (1,386,764) | (1,398,131) | (1,076,608) | (1,077,551) |
| Total assets less current liabilities | | 3,410,391 | 3,410,456 | 3,047,221 | 3,040,493 |
| Non-current liabilities | | | | | |
| Trade and other payables | 13 | (130) | (130) | (10,684) | (10,684) |
| Provisions | 14 | (183,259) | (183,259) | (170,657) | (170,657) |
| | | (183,389) | (183,389) | (181,341) | (181,341) |
| Total assets less total liabilities | | 3,227,002 | 3,227,067 | 2,865,880 | 2,859,152 |
| Taxpayers equity and other reserves | | | | | |
| General fund | | (1,803,575) | (1,799,074) | (1,563,913) | (1,553,889) |
| Revaluation reserve | | (1,073,361) | (1,077,927) | (1,135,151) | (1,138,447) |
| Intellectual property reserve | | (106,405) | (106,405) | (68,124) | (68,124) |
| Pension reserve | | (243,661) | (243,661) | (98,692) | (98,692) |
| Total reserves | | (3,227,002) | (3,227,067) | (2,865,880) | (2,859,152) |

The notes on pages 147 to 183 form part of these accounts



Dame Ottoline Leyser
Accounting Officer
UK Research and Innovation

13th July 2021

Consolidated Statement of Cash Flows

| | Note | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|---|-------|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Cash flows from operating activities | | | | | |
| Net expenditure for the period | SoCNE | (8,810,725) | (8,805,203) | (7,797,834) | (7,798,596) |
| Adjustments for non-cash transactions | 15 | 234,920 | 233,726 | 295,993 | 297,983 |
| (Increase) in trade and other receivables | 11 | (311,801) | (268,078) | (51,459) | (4,233) |
| Increase in trade and other payables | 13 | 302,711 | 308,172 | 35,724 | 30,010 |
| Increase in provisions | 14 | 9,492 | 14,456 | 72,552 | 72,552 |
| Net cash outflow from operating activities | | (8,575,403) | (8,516,927) | (7,445,024) | (7,402,284) |
| Cash flows from investing activities | | | | | |
| Purchase of property, plant and equipment | 7 | (345,942) | (345,942) | (197,628) | (197,628) |
| Purchase of intangible assets | 8 | (4,910) | (4,910) | (26,101) | (26,101) |
| Investment in joint ventures | 9.1 | (21,806) | (21,806) | (17,858) | (17,858) |
| Other investments | 9.3 | - | (2,372) | - | (715) |
| Investment in Loans | 9.4 | (939) | (38,590) | - | (21,293) |
| Proceeds of disposal of investments | | - | 5,588 | 735 | 735 |
| Proceeds of disposal of assets held for sale | | 4,841 | 4,841 | 5,317 | 5,317 |
| Proceeds of disposal of property, plant and equipment | | 3,286 | 3,286 | 15 | 15 |
| Net cash outflow from investing activities | | (365,470) | (399,905) | (235,520) | (257,528) |
| Net cash outflow before financing activities | | (8,940,873) | (8,916,832) | (7,680,544) | (7,659,812) |
| Cash flows from financing activities | | | | | |
| Grant-in-aid received from BEIS | | 8,968,356 | 8,968,356 | 7,781,488 | 7,763,688 |
| Net cash inflows from financing activities | | 8,968,356 | 8,968,356 | 7,781,488 | 7,763,688 |
| Net increase/(decrease) in cash and cash equivalents | | 27,483 | 51,524 | 100,944 | 103,876 |
| Cash and cash equivalents at the beginning of the period | | 204,368 | 207,934 | 103,424 | 104,058 |
| Cash and cash equivalents at the end of the period | | 231,851 | 259,458 | 204,368 | 207,934 |

The notes on pages 147 to 183 form part of these accounts

Consolidated Statement of Changes in Total Equity

Consolidated

| | General reserve £000 | Revaluation reserve £000 | Pension reserve £000 | Intellectual property reserve £000 | Total reserves £000 |
|--------------------------------|-------------------------|-----------------------------|-------------------------|---------------------------------------|------------------------|
| Balance at 1 April 2020 | (1,553,889) | (1,138,447) | (98,692) | (68,124) | (2,859,152) |
| Grant in aid from BEIS | (8,968,356) | - | - | - | (8,968,356) |
| Net expenditure for the period | 8,805,203 | - | - | - | 8,805,203 |

Movements in reserves:

| | | | | | |
|--|--------------------|--------------------|------------------|------------------|--------------------|
| Net gain on revaluation of property, plant and equipment | - | (6,855) | - | - | (6,855) |
| Net gain on revaluation and additions of intangible assets | - | - | - | (54,469) | (54,469) |
| Net loss on revaluation of investments | - | 8,491 | - | - | 8,491 |
| Actuarial gain in the pension scheme | - | - | (146,055) | - | (146,055) |
| Contributions from other employers in the pension scheme | - | - | (5,874) | - | (5,874) |
| Transfers between reserves | (82,032) | 58,884 | 6,960 | 16,188 | - |
| Balance at 31 March 2021 | (1,799,074) | (1,077,927) | (243,661) | (106,405) | (3,227,067) |

Parent

| | General reserve £000 | Revaluation reserve £000 | Pension reserve £000 | Intellectual property reserve £000 | Total reserves £000 |
|--------------------------------|-------------------------|-----------------------------|-------------------------|---------------------------------------|------------------------|
| Balance at 1 April 2020 | (1,563,912) | (1,135,152) | (98,692) | (68,124) | (2,865,880) |
| Grant in aid from BEIS | (8,968,356) | - | - | - | (8,968,356) |
| Net expenditure for the period | 8,810,725 | - | - | - | 8,810,725 |

Movements in reserves:

| | | | | | |
|--|--------------------|--------------------|------------------|------------------|--------------------|
| Net gain on revaluation of property, plant and equipment | - | (6,855) | - | - | (6,855) |
| Net gain on revaluation and additions of intangible assets | - | - | - | (54,469) | (54,469) |
| Net loss on revaluation of investments | - | 9,762 | - | - | 9,762 |
| Actuarial gain in the pension scheme | - | - | (146,055) | - | (146,055) |
| Contributions from other employers in the pension scheme | - | - | (5,874) | - | (5,874) |
| Transfers between reserves | (82,032) | 58,884 | 6,960 | 16,188 | - |
| Balance at 31 March 2021 | (1,803,575) | (1,073,361) | (243,661) | (106,405) | (3,227,002) |

The notes on pages 147 to 183 form part of these accounts

Consolidated Statement of Changes in Total Equity

Consolidated

| | General reserve £000 | Revaluation reserve £000 | Pension reserve £000 | Intellectual property reserve £000 | Total reserves £000 |
|--|-------------------------|-----------------------------|-------------------------|---------------------------------------|------------------------|
| Balance at 1 April 2019 | (1,436,607) | (1,152,327) | (44,335) | (69,447) | (2,702,716) |
| Grant in aid from BEIS | (7,763,688) | - | - | - | (7,763,688) |
| Net expenditure for the period (excl transfer of undertakings) | 7,798,596 | - | - | - | 7,798,596 |
| Movements in reserves: | | | | | |
| Net gain on revaluation of property, plant and equipment | - | (54,555) | - | - | (54,555) |
| Net gain on revaluation of intangible assets | - | - | - | (13,073) | (13,073) |
| Cashflow hedge | - | (11,770) | - | - | (11,770) |
| Net gain on revaluation of investments | - | (15,493) | - | - | (15,493) |
| Actuarial gain in the pension scheme | - | - | (65,794) | - | (65,794) |
| Contributions from other employers in the pension scheme | - | - | (6,116) | - | (6,116) |
| Notional services charge | (24,517) | - | - | - | (24,517) |
| Transfers between reserves | (127,673) | 95,698 | 17,553 | 14,396 | (26) |
| Balance at 31 March 2020 | (1,553,889) | (1,138,447) | (98,692) | (68,124) | (2,859,152) |

Parent

| | General reserve £000 | Revaluation reserve £000 | Pension reserve £000 | Intellectual property reserve £000 | Total reserves £000 |
|--|-------------------------|-----------------------------|-------------------------|---------------------------------------|------------------------|
| Balance at 1 April 2019 | (1,428,068) | (1,150,904) | (44,335) | (69,447) | (2,692,754) |
| Grant in aid from BEIS | (7,781,488) | - | - | - | (7,781,488) |
| Net expenditure for the period (excl transfer of undertakings) | 7,797,834 | - | - | - | 7,797,834 |
| Movements in reserves: | | | | | |
| Net gain on revaluation of property, plant and equipment | - | (54,555) | - | - | (54,555) |
| Net gain on revaluation of intangible assets | - | - | - | (13,073) | (13,073) |
| Cashflow hedge | - | (11,770) | - | - | (11,770) |
| Net gain on revaluation of investments | - | (13,621) | - | - | (13,621) |
| Actuarial gain in the pension scheme | - | - | (65,794) | - | (65,794) |
| Contributions from other employers in the pension scheme | - | - | (6,116) | - | (6,116) |
| Notional services charge | (24,517) | - | - | - | (24,517) |
| Transfers between reserves | (127,673) | 95,698 | 17,553 | 14,396 | (26) |
| Balance at 31 March 2020 | (1,563,912) | (1,135,152) | (98,692) | (68,124) | (2,865,880) |

The notes on pages 147 to 183 form part of these accounts

Notes to the Accounts

1. Statement of Accounting policies

United Kingdom Research and Innovation (UKRI) is an executive non-departmental public body established by the United Kingdom Parliament. The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been applied consistently to all the years presented unless otherwise stated.

NOTE 1.1 Basis of accounting

The consolidated Financial statements have been prepared in accordance with the Accounts Direction issued by the Secretary of State for Business, Energy and Industrial Strategy, with approval of HM Treasury, in pursuance of Section 14(2) of Schedule 9 of the Higher Education and Research Act 2017.

The consolidated Financial statements have been prepared in accordance with the 2020-21 Government Financial Reporting Manual (FRoM) issued by HM Treasury. The accounting policies contained in the FRoM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context.

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

Going concern

UKRI is dependent on funding from the Department of Business, Energy and Industrial Strategy (BEIS) to meet liabilities falling due within future years. Confirmation of UKRI's final budget allocation for 2021-22 was received from BEIS in June 2021. UKRI has no reason to believe that future funding will not be forthcoming beyond 2021-22, particularly given the Government's commitment to increasing levels of research and development (R&D) to at least 2.4% of GDP by 2027.

It has accordingly been considered appropriate to adopt a going concern basis for the preparation of the Financial statements. UKRI monitors future levels of commitment to ensure they remain within anticipated budgets.

NOTE 1.2 Accounting convention

The consolidated 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.

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

NOTE 1.3 Presentational currency

The consolidated financial statements are presented in pounds sterling, the functional currency of UKRI. Transactions denominated in a foreign currency are translated into sterling at the rate of exchange on the date of each transaction. In preparing the financial statements, monetary assets and liabilities denominated in foreign currencies are translated at the rates prevailing at the reporting date. All translation differences of monetary assets and liabilities are included in net expenditure for the year.

NOTE 1.4 Basis of consolidation

The Group comprises:

- UK Research and Innovation (UKRI)
- STFC Innovations Limited
- Innovate UK Loans Limited

UKRI prepares financial statements in accordance with the FReM. Innovate UK Loans Limited and STFC Innovations Limited prepare accounts under IFRS as adopted by the EU. For those bodies that do not prepare financial statements in accordance with the FReM, adjustments are made at consolidation if necessary where differences would have a significant effect on the financial statements.

NOTE 1.5 Changes in accounting policy

There are no changes in accounting policies in the 2020-21 financial year.

NOTE 1.6 New accounting standards adopted in the year, FReM changes and future accounting standards

There have been no accounting standards adopted in the year and no expected changes in the FReM applicable to the Group for financial year 2020-21.

Future changes

IFRS 16 Leases supersedes IAS 17 Leases and will be adopted by UKRI for periods beginning on or after 1 April 2021. IFRS 16 provides a single lessee accounting model and requires a lessee to recognise assets and liabilities for leases which last over 12 months, largely eliminating the current 'off-balance sheet' treatment of operating leases under IAS 17. There is an exemption if the underlying asset meets the IFRS 16 criteria to be classified as of "low value". This is deemed to be £10,000 for the group, which is the capitalisation threshold for UKRI.

IFRS 16 requires that assets and liabilities be recognised initially at the discounted value of the minimum lease payments, and that the assets, to be described as "right of use" assets, will be presented under Property, Plant and Equipment. The Group expects that its existing financial leases will continue to be classified as leases. All existing operating leases, or new leases identified will fall within the scope of IFRS 16.

The Group has assessed the impact that the application of IFRS 16 will have on the Statement of Comprehensive Net Expenditure for the financial year ending 31 March 2022, and on the Statement of Financial Position at that date.

The standard is expected to decrease total expenditure in 2021-22 by approximately £0.17 million. The right of use assets are expected to be increased by approximately £49.68 million, whilst the associated lease liability will increase by approximately £68.26 million.

NOTE 1.7 Grant-in-aid

In line with the FReM, Grant-in-aid for revenue purposes and grants from BEIS (the controlling body) are recognised as a financing flow and thus credited to the General Reserve.

NOTE 1.8 Income

Revenue is recognised when goods are delivered and title has passed, and services in the accounting period in which the service is rendered.

Grant Income receivable and funding for collaborative projects are recognised as income over the period in which UKRI recognises the related costs for which the grant or funding is intended to compensate in accordance with IAS 20. This accounts for approximately 76% of UKRI income.

Commercial income is recognised in line with the satisfaction of performance obligations at a point in time in line with the terms of contract or license agreement, as per IFRS 15. Where the contract is for the supply of goods this will be at a point in time. Commercial income includes royalties, rental of facilities for use by third parties, property rental or canteen/restaurant revenue. This represents approximately 24% of UKRI income.

NOTE 1.9 Deferred income

UKRI receives funding for projects to support UKRI research, separate to grant-in-aid provided by BEIS. The majority of such funding is received from the UK public sector, charities, and from the European Commission (EC). Some funding may involve payment for projects in advance of the accounting period to which it relates.

Where there is a variance between activity in the accounting period and received funding, income will be deferred when there is a condition which makes the grant repayable or returnable (BEIS grant-in-aid funding cannot be classified as deferred income).

NOTE 1.10 Staff costs

Staff costs are recognised as expenses when UKRI becomes obliged to pay them, including the cost of any untaken leave entitlement.

NOTE 1.11 Grants and training awards payable**Research Grants, Fellowships and Studentships**

Research grants and fellowships are paid on an instalment basis in accordance with an agreed payment profile. Grant payments made in advance or in arrears are accounted for on a prepayments or accruals basis in the financial statements. Where the grant documentation does not specify a pre-agreed payment profile or other matching considerations, obligations are recognised in full. Studentship payments are paid on a quarterly instalment basis in advance or arrears directly to the research institute.

Where the profile indicates that an unclaimed and/or unpaid amount exists at the Statement of Financial Position date, such sums are accrued in the financial statements. Where the profile indicates a payment of grant that is yet to be utilised by the recipient, a prepayment is recognised.

Innovate UK Technology Grants

Technology grant expenditure is recognised in the period in which eligible activity creates an entitlement in line with the terms and conditions of the grant.

Where activity has been undertaken but no grant claim has been received, accrued grants are charged to the Statement of Comprehensive Net Expenditure based on estimates (see Note 1.29 below) and are included in accruals in the Statement of Financial Position.

Research England Formula-based Grants

Most grants are paid on an agreed profile, as a contribution to research costs within institutions.

The profiles are periodically updated throughout the academic year, and as such no financial year end accruals are expected for these streams of expenditure.

Other Research England Grants

For Research England grants, such as the Strength in Places Fund, which fund agreed and specified eligible activity, expenditure is recognised in the period in which eligible activity creates an entitlement in line with the terms and conditions of the grant.

Future commitments at the Statement of Financial Position date are disclosed in Note 20.

NOTE 1.12 Ownership of equipment purchased with grants

Equipment purchased by an institution using UKRI grants belongs to the institution and is not included in UKRI property, plant and equipment. UKRI reserves the right through its grant conditions to determine the disposal of such equipment and how any disposal proceeds are to be used.

NOTE 1.13 Notional UK SBS charge

In 2020-21, UKRI received a transfer of budget from BEIS and paid UK SBS for the services it provided to UKRI. These costs are included within Finance, HR, IT and support costs within the Purchase of Goods and Services in note 5.1.

This is a change in arrangement from previous periods. Between 1st April 2018, when the ownership of UK SBS Ltd transferred from the Research Councils to BEIS, and 31st March 2020, the cost of the services provided by UK SBS ceased to be a direct charge and instead was deducted from UKRI's funding allocation. In order to reflect the cost of using the services provided by UK SBS, the charge was shown as a notional cost and written back to the General Reserve.

NOTE 1.14 Taxation

UKRI is subject to corporation tax on taxable profits. Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to HM Revenue and Customs, based on tax rates and laws that are enacted or substantively enacted by the reporting date.

NOTE 1.15 Value added tax

As UKRI is partially exempt for VAT purposes, all expenditure and non-current asset purchases are shown exclusive of VAT except in the following circumstances:

- Irrecoverable VAT is charged to the Statement of Comprehensive Net Expenditure and included under the relevant expenditure heading.
- Irrecoverable VAT on the purchase of an asset is included in additions.
- Residual input tax reclaimable by the application of the partial exemption formula is taken to the Statement of Comprehensive Net Expenditure as a reduction of expenditure.
- The net amount due to, or from, HM Revenue and Customs in respect of VAT is included within other receivables and payables on the Statement of Financial Position.

NOTE 1.16 Intangible assets**Recognition**

Expenditure on intangible assets is capitalised where the cost is £10,000 or more and is applied on a grouped basis using a threshold of £10,000 where the elements in substance form a single asset.

Subsequent acquisitions of less than £10,000 in value which are of the same nature as existing grouped assets are appended. Otherwise, expenditure on intangible assets which fall below £10,000 is charged as an expense in the Statement of Comprehensive Net Expenditure.

Measurement

Intangible assets are initially measured at cost in line with IAS 38. For separately acquired assets cost comprises the purchase price and any directly attributable costs to prepare the asset for its intended use. The cost of internally generated assets comprises all directly attributable costs necessary to create, produce, and prepare the asset to be capable of operating in the manner intended by management.

There are no active markets for any of UKRI's intangible non-current assets which are valued at the lower of depreciated replacement cost and value in use using a valuation technique (for example for income-generating assets); where there is no value in use, depreciated replacement cost is used. Assets of low value or with short useful lives are carried at cost less accumulated amortisation and impairment losses as a proxy for fair value.

Impairment

Intangible assets are monitored for any indication of impairment. At the end of each reporting period, tests for impairment are carried out for any such asset with an indefinite useful life or in the course of development.

Where indications of impairment exist, and any possible differences are estimated to be significant, the recoverable amount of the asset is estimated and, where this is less than the carrying amount of the asset, an impairment loss is recognised in the Statement of Comprehensive Net Expenditure.

Where an impairment loss is subsequently reversed, the reversal is credited in the Statement of Comprehensive Net Expenditure, up to the amount of the original loss, adjusted for amortisation that would have been charged if the loss had not been recognised.

Amortisation

Amortisation is provided on all intangible assets from the date at which they are available for their intended use at rates calculated to write off the cost of each asset (less any estimated residual value) on a straight-line basis over its expected useful economic life. UKRI reviews and updates the remaining useful economic lives of its assets each year. The estimated useful economic lives of the intangible assets currently in service are summarised as below:

| | |
|-------------------------------|---|
| Internally developed software | 3 – 5 years |
| Software licenses | Up to 15 years (subject to the length of the license) |
| Internally developed websites | 2 – 5 years |
| Data sets | 5 – 10 years |
| Patents | Up to 15 years (subject to the length of agreement) |

Disposals

When scrapping or disposing of an intangible asset, the carrying amount is written off to the Statement of Comprehensive Net Expenditure and a loss (or gain) is recognised and reported net of any disposal proceeds.

NOTE 1.17 Property, plant and equipment

Recognition

Expenditure on the acquisition, creation or enhancement of Property, plant and equipment is capitalised on an accruals basis, provided that it is probable that the future economic benefit including service potential, associated with the item will flow to UKRI and the cost of the item can be measured reliably. A capitalisation threshold of £10,000 is applied to all asset classes. Expenditure below this value is charged as an expense in the Statement of Comprehensive Net Expenditure.

Property, plant and equipment usually comprises single assets. However, capitalisation is applied on a grouped basis using a threshold of £10,000 where the elements in substance form a single asset. Further, where an item includes material components with significant different useful economic lives, those components are capitalised separately and depreciated over their specific useful economic lives.

Expenditure that maintains, but does not add to, an asset's potential to deliver future economic benefits or service potential (i.e. repairs and maintenance) is charged as an expense when it is incurred.

Any capital funding provided by UKRI to independent institutes relating to UKRI owned assets is accounted for as a non-current asset addition in the Property, plant and equipment note based on the construction costs during the year up to the Statement of Financial Position date.

Measurement

Property, plant and equipment are initially measured at cost, comprising the purchase price plus any costs attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. The initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located are recognised as a provision where an obligation to dismantle or remove the asset arises from its acquisition or usage. The related expense is recognised as a provision expense in the Statement of Comprehensive Net Expenditure.

Assets are thereafter carried in the Statement of Financial Position using the following measurement bases:

Land, buildings, Polar research stations, ships and aircraft are professionally revalued every five years and in the intervening period relevant indices are used. Indexation is not applied to assets under construction.

Specialised assets are valued on a depreciated replacement cost basis in line with the FReM.

For non-specialised assets, market value in existing use is used where this can be established. Any surplus on revaluation is taken to a revaluation reserve.

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 in the year of replacement.

Impairment

Property, plant and equipment are monitored for any indication of impairment. At the end of each reporting period, tests for impairment are carried out for any assets with a remaining useful life and on assets in the course of construction.

Where an annual check is impractical given the number of assets held, a targeted risk-based approach is taken to assess all assets within 18 months of the end of their useful life plus a randomly selected check of 10% by number of the whole asset population.

Where indications of impairment exist, or trigger points are noted (such as transfer from AUC into Property, plant and equipment) and any changes are estimated to be significant, the recoverable amount of the asset is estimated and, where this is less than the carrying amount of the asset, an impairment loss is recognised in the Statement of Comprehensive Net Expenditure.

Where an impairment loss is subsequently reversed, the reversal is credited in the Statement of Comprehensive Net Expenditure, up to the amount of the original loss, adjusted for depreciation that would have been charged if the loss had not been recognised. Anything over and above is recognised in the revaluation reserve.

Depreciation

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

Depreciation is provided on all property, plant and equipment, apart from assets under construction, from the date at which they are available for their intended use at rates calculated to write off the cost of each asset (less any estimated residual value) on a straight-line basis over its expected useful economic life. Increased depreciation charges arising from revaluations are matched by transfers from the revaluation reserve to the general reserve. Assets that are under construction are not depreciated until such time as they are available for their intended use.

UKRI reviews and updates the remaining useful economic life of its assets each year. The estimated useful lives of the assets currently in service are summarised as follows:

| | |
|---------------------|---|
| Freehold land | Not depreciated |
| Leasehold land | The length of the lease |
| Freehold buildings | Up to 60 years |
| Leasehold buildings | Up to 60 years (subject to the length of the lease) |

| | |
|----------------------------------|--|
| Decommissioning assets | Up to 60 years (matched to related assets) |
| Scientific equipment | 3 to 30 years |
| IT equipment | Up to 20 years |
| Other plant and machinery | 3 to 30 years |
| Furniture, fixtures and fittings | Up to 10 years |
| Motor vehicles | Up to 15 years |
| Polar research stations | Up to 60 years |
| Ships | 20 to 50 years |
| Aircraft | 15 to 50 years |

Disposals

When scrapping or disposing of property, plant and equipment, the carrying amount is written off to the Statement of Comprehensive Net Expenditure and a loss (or gain) is recognised and reported net of any disposal proceeds. On disposal of a revalued asset, the resulting element of the Revaluation reserve that is realised is transferred directly to the General reserve.

NOTE 1.18 Non-current assets held for sale

Non-current assets are classified as held for sale if their carrying amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable, the asset is available for immediate sale in its present condition, management are committed to the sale and completion is expected within one year of the date of classification.

The asset is revalued immediately before reclassification and carried at the lower of this amount and fair value, less selling costs. Assets held for sale are not depreciated. Where there is a subsequent reduction in fair value, the loss is reported in the Statement of Comprehensive Net Expenditure, and increases are only recognised as gains in the Statement of Comprehensive Net Expenditure up to the amount of any previously reported losses.

NOTE 1.19 Investments in joint arrangements and associates

UKRI's investments in joint ventures and associates are accounted for using the equity method of accounting in both the separate UKRI financial statements and the consolidated financial statements.

The investment in an associate or joint venture is initially recorded at cost and is subsequently adjusted to reflect UKRI's share of the net profit or loss of the associate or joint venture. Where appropriate, UKRI adjusts information from the investee's financial records to bring it in line with the FReM.

Details of UKRI's investments in Joint Ventures and Associates can be found in Note 11.

NOTE 1.20 Financial instruments

UKRI recognises and measures financial instruments in accordance with IFRS 9 Financial Instruments as interpreted by the FReM.

A financial asset or financial liability is measured initially at fair value plus, for an item not at fair value through profit or loss, transaction costs that are directly attributable to its acquisition or issue.

UKRI derecognises a financial asset when the contractual rights to receive future cash flows from the financial asset expire or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which UKRI neither transfers nor retains substantially all of the risks and rewards of ownership and does not retain control of the financial asset.

UKRI derecognises a financial liability when its contractual obligations are discharged, cancelled or expired.

Innovation loans

Innovation Loans are designed to stimulate later stage innovation and are offered on non-commercial terms including a low rate of interest.

Innovation loans pass the business model test (where the objective of the business model is to hold the financial assets to collect the contractual cashflows) and the cash flows characteristics test; therefore, the loans are held at amortised cost. In accordance with IFRS 9, amortised cost loans are recognised at fair value at initial recognition. A fair value adjustment is required for innovation loans because a rate of interest is charged that is below the market rate (non-commercial terms).

Interest income is calculated using the effective interest method and is recognised in the Statement of Comprehensive Net Expenditure.

Where credit risk has increased significantly since initial recognition, lifetime expected losses are recognised. In these circumstances, interest revenue is calculated on the gross carrying amount of the asset.

For Innovation loans, which are assessed to be credit impaired or defaulted, a lifetime expected credit loss is recognised and interest revenue is calculated on the net carrying amount net of credit allowance.

Innovation loans will be written off at the point when any further recoveries are unlikely or become uneconomical to pursue. At this point, any remaining provision held against a credit-impaired (or defaulted) loan asset will be taken to the Statement of Comprehensive Net Expenditure and the value of the loan written off in the Statement of Financial Position.

NOTE 1.21 Trade and other receivables

Under IFRS 9, trade and other receivables are measured at amortised cost. In line with the FReM, the simplified approach will be adopted and any loss allowances will be recognised at an amount equal to expected lifetime credit losses.

NOTE 1.22 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 UKRI is established, or when the corresponding assets or expenses are recognised.

NOTE 1.23 Cash and cash equivalents

Cash and cash equivalents comprise cash in hand and other short-term highly liquid investments which are readily convertible to known amounts of cash, are subject to insignificant risk of changes in value, and have an original maturity of three months or less. Any bank overdraft amounts without the right of offset are included within trade payables and other liabilities.

NOTE 1.24 Risks

Due to the non-trading nature of its activities, and the way in which UKRI is financed, UKRI is not exposed to the degree of financial risk faced by non-public sector entities. UKRI has only very limited powers to borrow or invest surplus funds. Financial assets and liabilities are generated by day-to-day operational activities and are not held to change the risks facing UKRI in undertaking its activities.

UKRI is subject to foreign currency risk through the maintenance of bank accounts in foreign currencies to deal with day-to-day overseas transactions. The risk is low-level and not actively managed by UKRI.

NOTE 1.25 Provisions

Provisions are recognised and measured in accordance with IAS 37 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, except in the case of the ILL decommissioning provision, where the underlying provision that determines UKRI's share of the provision has been calculated using a discount rate of 3.39% (2020: 3.75%), in accordance with the Fifth Protocol to the Intergovernmental Convention, as agreed by the members of ILL.

NOTE 1.26 Leases

Leases are classified as finance leases when the risks and rewards of ownership are transferred substantially to the lessee; other leases are classified as operating leases.

Finance leases – UKRI as lessor

Amounts due from lessees under finance leases are recognised as receivables at the amount of UKRI's net investment in the lease. Finance lease income is allocated to accounting periods to reflect a constant periodic rate of return on UKRI's net investment outstanding in respect of the leases.

Finance leases – UKRI as lessee

Assets subject to finance leases and the associated liabilities for future payments (if any) are recognised in the Statement of Financial Position.

Operating leases – UKRI as lessor

Assets subject to operating leases are recognised in the Statement of Financial Position with rental income plus initial direct costs incurred in arranging the lease, including incentives to the lessee to enter into the lease, recognised on a straight-line basis over the lease term.

Operating leases – UKRI as lessee

Rentals payable under operating leases, including benefits received and receivable as incentives to enter into the leases, are expensed on a straight-line basis over the term of the lease.

NOTE 1.27 Pensions

Retirement benefits to employees of UKRI are provided by:

- the Research Councils' Pension Scheme (RCPS);
- the Principal Civil Service Pension Scheme (PCSPS);
- the Medical Research Council Pension Scheme (MRCPS);
- the Prudential and Scottish Widows Pension Scheme (PSWPS);
- and United Kingdom Atomic Energy Authority (UKAEA).

The RCPS, PCSPS, PSWPS and UKAEA are unfunded pension schemes and the MRCPS is a funded scheme. The treatment of the different pension schemes is explained below:

Unfunded pension schemes

The RCPS, PCSPS and UKAEA pension schemes are public sector pension schemes and, as required by the Government Financial Reporting Manual, it is the scheme (rather than the employer) that reports the expected value of future pension payments. Employers whose employees are members of these pension schemes account for the scheme as a defined contribution plan, with employer contributions charged to the Statement of Comprehensive Net Expenditure in the period to which they relate.

Funded pension scheme

Employer superannuation costs are based on an actuarially-derived calculation under IAS 19: see Note 12. The defined benefit plan requires contributions to be made to separately administered funds. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit actuarial valuation method.

Actuarial gains and losses are recognised in full as income or expense in the Statement of Comprehensive Net Expenditure.

The past service cost is recognised as an expense on a straight-line basis over the average period until the benefits become vested. If the benefits are already vested immediately following the introduction of, or changes to, a pension plan, past service cost is recognised immediately.

The defined benefit asset (or liability) is the aggregate of the present value of the defined benefit obligation and actuarial gains and losses (not recognised reduced by past service cost not yet recognised) and the fair value of plan assets out of which the obligations are to be settled directly. If such aggregate shows a surplus, the asset is measured at the lower of such aggregate or the aggregate of cumulative unrecognised net actuarial losses and past service cost and the present value of any economic benefits, available in the form of refunds, from the plan or reductions in the future contributions to the plan. The net asset is recognised as UKRI derives benefits from the reduced contributions to the scheme.

Defined contribution pension schemes

Contributions are charged to the Statement of Comprehensive Net Expenditure when they become payable. UKRI has no further liabilities in respect of benefits to be paid to members.

NOTE 1.28 Contingent assets and liabilities

Contingent assets and liabilities are disclosed in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets.

Where an outflow of economic benefits from a past event is possible but not probable, UKRI discloses a contingent liability. No disclosure is made for those contingencies where crystallisation is considered to be remote or the amounts involved are immaterial.

Where an inflow of economic benefits from a past event is probable, UKRI discloses a contingent asset. No disclosure is made where realisation is considered to be possible, but not probable, or the amounts involved are immaterial.

NOTE 1.29 Judgements, estimates and assumptions

Funded Pension Scheme

The determination of the pension cost and defined benefit obligation (liabilities) of the Medical Research Council Pension Scheme depends on the selection of certain assumptions, which include the discount rate, inflation rate, salary growth, mortality rates and expected rate of return. The pension assets include £380 million of property investments and approximately £475 million of unquoted equity investments, which are estimates and are based on fund manager, valued by the expert valuer valuation reports as at 31/3/2021. See Note 10 for further details.

Property, Plant and Equipment

A number of judgements have been made around valuation of PPE, useful economic lives, depreciation rates and indices used. These have been more fully explained in Note 1.17 above.

Patents and Royalties

Where patents and royalties are recognised as intangible assets, these are revalued annually by specialists on the basis of future royalty income streams. Management applies the discount rate. Estimates are subject to business uncertainty in terms of sales and the fluctuation of exchange rates. Judgement has been required in assessing the impact of these variables. The policy has been judged to be compliant with IAS 38.

Innovation Loans

The measurement of the expected credit loss under IFRS 9 for the innovation loans made to UK small or medium-sized enterprises is an accounting estimate.

In assessing the expected credit loss provision, management believes to require the most critical accounting judgements are:

- the approach of calculating a fair value at origination of an innovation loan including discount rate
- the approach to applying the staging requirements – identifying significant increases in credit risk and identifying credit impaired loans and the definition of default;
- the basis of forward-looking information and multiple economic scenarios; and
- the approach of calculating a fair value at origination of an innovation loan including discount rate.

Grant Accruals and Prepayments

The UKRI financial statements include a grant accrual for each project (including fellowships, studentships and grants) where it has been determined that there is an unclaimed amount at the year-end that is due to participants.

Given the nature of this estimate and the history of recipients not spending, and therefore not being reimbursed for, their full entitlement, an expected future underspend percentage is calculated based on historic data of underspend against payment profile and applied to the year-end balance.

Where the impact of no cost extensions is considered material, a new grant profile is modelled and a prepayment is recognised as a result. Payments continue to be made quarterly in accordance with the original grant profile, however the new profile recognises expenditure through to the new end date of the grant agreed between UKRI and the grant recipient.

Innovate UK Technology Grant Accrual

The technology grant accrual is based on participants' forecast of expenditure submitted with their latest claim, adjusted for the participants' historical forecasting accuracy. For a number of large non-core projects, the Knowledge Transfer Network (KTN) and Catapult Centres, Innovate UK contacts the participants directly to obtain further information and assurances on claims due at the year-end date. For those grants that are based on procurements, Innovate UK confirms the accruals based on purchase orders raised for the period. The technology grant accrual as at 31 March 2021 was £685.3 million (31 March 2020: £492.8 million).

The major sources of uncertainty in the estimate relate to the profiling of incurring and defraying the project costs that create the entitlement to the grant, and the amount of the grant not utilised at the end of the project. The projects funded by Innovate UK are typically collaborations between private businesses and academia; this aspect introduces a degree of interdependency between project partners that may impact on the timing of individual work packages. In addition, projects are typically two to five years long, which permits a degree of flexibility for grant recipients in the scheduling of their project activity. These projects seek to develop new technology-based products and services for future markets and, as such, are inherently uncertain in terms of their success and, related to this, the project duration and activity costs ultimately incurred.

Decommissioning Provisions

Calculation of the decommissioning costs for STFC and NERC facilities constitutes a significant accounting estimate. External experts give insight into the current cost of the work to be undertaken and assumptions regarding inflation rates. Management translates these costs into a provision using knowledge of the timing of the decommissioning and the profiling of the expenditure. To reduce the risk of material misstatement, the estimates and assumptions are reviewed annually.

STFC's share of the Institut Laue-Langevin (ILL) decommissioning provision is taken from information included in the ILL financial statements. The provision was re-evaluated in 2019 by the Commissariat à l'Énergie Atomique (CEA) using information provided by ILL management.

2. Statement of Operating Expenditure by Operating Segment

Analysis of UKRI information by business segment

| 2020-21 | AHRC £000 | BBSRC £000 | EPSRC/ UKRI £000 | ESRC £000 | IUK £000 | MRC £000 | NERC £000 | RE £000 | STFC £000 | Total £000 |
|-------------------------------------|----------------|----------------|---------------------|----------------|------------------|----------------|----------------|------------------|----------------|------------------|
| Total operating income | (2,305) | (2,380) | (14,664) | (9,459) | (119,816) | (132,442) | (29,774) | (2,809) | (55,051) | (368,700) |
| Staff costs | 6,024 | 9,039 | 87,580 | 9,897 | 55,099 | 96,009 | 72,395 | 4,820 | 135,817 | 476,680 |
| Purchase of Goods and services | 265 | 1,428 | 75,052 | 1,747 | 42,425 | 77,961 | 53,410 | 3,376 | 374,766 | 630,430 |
| Depreciation and impairment charges | (8) | 11,768 | 786 | 42 | 11,250 | 30,566 | 27,056 | - | 105,651 | 187,111 |
| Research and Innovation | 175,561 | 449,613 | 1,145,890 | 312,856 | 1,594,994 | 834,043 | 311,056 | 2,737,566 | 276,157 | 7,837,736 |
| Provision expense | - | 12 | (18) | - | 4,959 | 33 | 3,791 | - | 9,756 | 18,533 |
| Other operating expenditure | - | (125) | 1,222 | - | (30) | 3,019 | 30 | - | 17,175 | 21,291 |
| Net expenditure | 179,537 | 469,355 | 1,295,848 | 315,083 | 1,588,881 | 909,189 | 437,964 | 2,742,953 | 864,721 | 8,803,081 |

| 2019-20 | AHRC £000 | BBSRC £000 | EPSRC/ UKRI £000 | ESRC £000 | IUK £000 | MRC £000 | NERC £000 | RE £000 | STFC £000 | Total £000 |
|-------------------------------------|----------------|----------------|---------------------|----------------|------------------|----------------|----------------|------------------|----------------|------------------|
| Total operating income | (15) | (7,285) | (16,209) | (10,555) | (101,263) | (89,312) | (55,252) | (626) | (67,612) | (348,129) |
| Staff costs | 5,749 | 8,087 | 63,415 | 8,395 | 34,131 | 92,347 | 97,774 | 4,078 | 119,386 | 433,362 |
| Purchase of Goods and services | 1,277 | 3,628 | 66,884 | 1,995 | 44,210 | 80,672 | 72,852 | 2,440 | 316,485 | 590,443 |
| Depreciation and impairment charges | 12 | 11,284 | 555 | 100 | 8,953 | 25,739 | 32,066 | - | 111,950 | 190,659 |
| Research and Innovation | 133,971 | 455,928 | 1,101,728 | 253,531 | 1,238,815 | 696,998 | 286,631 | 2,383,394 | 250,124 | 6,801,120 |
| Provision expense | - | - | 4,104 | - | - | 536 | 290 | - | 68,740 | 73,670 |
| Other operating expenditure | - | (975) | (2,248) | - | 284 | 12,143 | 33 | - | 27,495 | 36,732 |
| Notional service charge | 943 | 1,779 | 2,610 | 1,464 | 566 | 5,117 | 6,063 | 26 | 5,949 | 24,517 |
| Net expenditure | 141,937 | 472,446 | 1,220,839 | 254,930 | 1,225,696 | 824,240 | 440,457 | 2,389,312 | 832,517 | 7,802,374 |

UKRI reports its expenditure by operating segments in accordance with IFRS 8 Operating Segments.

Operating segments are funding segments about which separate financial information is available that is regularly reviewed by the chief operating decision maker, the UKRI Executive Committee.

3. Total operating income

| | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|--|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Current grants from Central Government | (94,755) | (94,755) | (70,560) | (70,560) |
| Current grants from European Commission | (10,364) | (10,364) | (18,991) | (18,991) |
| Capital Grants | (9,721) | (9,721) | (5,286) | (5,286) |
| Current grants from private sector | (49,739) | (49,739) | (53,864) | (53,864) |
| Income from other government departments and public sector | (116,266) | (116,266) | (94,571) | (94,571) |
| Rental income | (8,391) | (8,391) | (7,328) | (7,328) |
| Sales of goods and services | (38,403) | (38,603) | (32,984) | (33,182) |
| Other income | (27,790) | (40,861) | (63,938) | (64,347) |
| | (355,429) | (368,700) | (347,522) | (348,129) |

4. Staff costs

| | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|-----------------------|-------------------------|---------------------------------|-------------------------|---------------------------------|
| | | | Re-presented | Re-presented |
| Wages and salaries | 344,150 | 346,947 | 306,718 | 307,443 |
| Social security costs | 33,676 | 33,735 | 32,658 | 32,714 |
| Other pension costs | 89,636 | 89,761 | 91,299 | 91,384 |
| | 467,462 | 470,443 | 430,675 | 431,541 |
| Staff severance costs | 6,237 | 6,237 | 1,821 | 1,821 |
| | 473,699 | 476,680 | 432,496 | 433,362 |

The £3.6 million changes to Other Pension Costs and Wages and Salaries in the prior year comparative result arose from an updating of the ledger mappings.

5.1 Purchase of goods and services

| | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|--|-------------------------|---------------------------------|-------------------------|---------------------------------|
| | | | Re-presented | Re-presented |
| Rentals under operating leases | 5,655 | 5,655 | 6,067 | 6,067 |
| Finance, HR, IT and support costs | 28,827 | 28,827 | 4,953 | 5,056 |
| Accommodation and office equipment costs | 139,427 | 139,921 | 143,264 | 143,382 |
| Consultancy and legal expenditure | 4,918 | 4,918 | 7,984 | 7,984 |
| Training and other staff costs | 4,131 | 4,132 | 5,045 | 5,081 |
| Travel and subsistence costs | 5,691 | 5,692 | 27,159 | 26,187 |
| Advertising and publicity | 2,500 | 2,558 | 6,937 | 6,982 |
| Professional services | 60,501 | 61,883 | 71,943 | 72,953 |
| Auditors remuneration | 475 | 600 | 450 | 591 |
| Programme management and administration of grants and awards | 3,010 | 3,010 | 4,890 | 4,890 |
| Professional and international subscriptions | 302,485 | 302,485 | 243,187 | 243,187 |
| Recharges | 25,899 | 25,966 | 24,809 | 24,948 |
| Other purchase of goods and services cost | 44,785 | 44,783 | 43,134 | 43,135 |
| | 628,304 | 630,430 | 589,822 | 590,443 |

The increase year on year for the finance, HR, IT and support costs includes £24.5 million (2019-20 £24.5 million notional costs) for support costs for services provided by UK Shared Business Services to UKRI in the year.

The increase in professional and international subscriptions includes an additional amount paid to the European Spallation Source for £24 million and the Square Kilometre Array for £24 million.

The changes to the prior year comparatives are as a result of increasing the number of lines this year and providing a more granular analysis.

5.2 Depreciation and impairment charges

| | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|-----------------------------------|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Depreciation | 131,913 | 131,913 | 130,305 | 130,305 |
| Amortisation of intangible assets | 40,216 | 40,216 | 58,161 | 58,161 |
| Impairment of PPE | 10,155 | 10,155 | 5 | 5 |
| Impairment of financial assets | - | - | - | - |
| Expected Credit Loss | 205 | 4,827 | 198 | 2,188 |
| | 182,489 | 187,111 | 188,669 | 190,659 |

5.3 Research and Innovation

| | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|---|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Research and Innovation grants | 1,844,688 | 1,844,688 | 1,391,165 | 1,391,165 |
| QR | 1,711,642 | 1,711,642 | 1,626,332 | 1,626,332 |
| Talent | 504,218 | 504,218 | 441,240 | 441,240 |
| Institutes, centres, facilities & catapults (ESA10) | 701,301 | 701,773 | 641,840 | 642,294 |
| Knowledge exchange | 130,407 | 130,407 | 153,887 | 153,887 |
| HEIF | 254,221 | 254,221 | 210,000 | 210,000 |
| International | 14,854 | 14,854 | 15,902 | 15,902 |
| Managed Programmes | 351,050 | 351,050 | 319,749 | 319,749 |
| Other costs | 43,056 | 43,056 | 33,191 | 33,191 |
| ISCF | 440,315 | 440,315 | 437,648 | 437,648 |
| NPIF | 462,616 | 462,616 | 338,487 | 338,487 |
| GCRF | 342,533 | 342,533 | 279,584 | 279,584 |
| Newton | 50,424 | 50,424 | 64,587 | 64,587 |
| Infrastructure | 868,244 | 868,244 | 751,406 | 751,406 |
| Competitive | 98,588 | 98,588 | 93,670 | 93,670 |
| Administration | 19,107 | 19,107 | 1,978 | 1,978 |
| | 7,837,264 | 7,837,736 | 6,800,666 | 6,801,120 |

Total research and Innovation grants expenditure increased by net £1.0bn in 2020-21, primarily due to new COVID initiatives (£540 million) funding during the year and an uplift of £300 million to World Class Labs funding provided by HMT during 2020-21 (largely focused in Infrastructure). This was partially offset by lower grant spend across in existing grant funding streams across the UKRI portfolio as a result of the impact of the pandemic on activity.

Talent expenditure increased by £63 million during 2020-21 due to the increase in spend in the Future Leaders Fellowships scheme following new starts under Rounds 1-4 of the scheme.

In March 2020, BEIS provided UKRI with permission to pay an additional £160 million (2019-20 £95 million) of QR funding. As a consequence, the QR grant allocations for 2021-22 have been reduced by £160 million (2019-20 £95 million). Over the two financial years the changes in funding cancel each other out so there is no impact on the funding provided to Higher Education Institutions in academic year 2020-21.

Managed programmes expenditure increased in 2020-21 as UKRI increased funding to the Dementia Research Institute and issued grant funding for advanced and innovative therapeutics supported by the Vaccine Task Force.

Knowledge Exchange decreased in 2020-21 due the Confidence in Concept (CiC) awards; £23 million of expenditure was accounted for in 2019-20 but due to the delay in the scheme no awards were paid during 2021-21.

NPIF Expenditure increased during 2020-21 by £124 million due primarily due to uplifts in Research England NPIF funding driving increased programme (Strategic Priorities Fund, Strength in Places Fund) and formula-based grants (Higher Education Innovation Fund and dual support consequential funding).

GCRF has increased during 2020-21 by £63 million due to new programmes; Coherence & Impact, Innovation and Commercialisation and International Partnerships.

The decrease year-on-year in Newton is due to the scheme's life cycle with many grant projects coming to an end.

The year-on-year increase in Administration is due to the transfer of the Polaris House freehold to the Government Property Agency; this required UKRI to recognise the associated loss on disposal as a Capital Grant in Kind.

5.4 Provision expense

| | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|--------------------------------------|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Provision expense - Early retirement | 5 | 5 | 29 | 29 |
| Provision expense - Other provisions | 140 | 140 | 4,094 | 4,094 |
| Provision expense - Loan commitments | - | 4,959 | - | - |
| Provision expense - Decommissioning | 13,429 | 13,429 | 69,547 | 69,547 |
| | 13,574 | 18,533 | 73,670 | 73,670 |

Included within decommissioning provisions are the decommissioning costs of ILL (in France) and ISIS (at the Harwell site). The relative figures are ILL £(7.3) million (2019-20 £60.2 million) and ISIS £(3.4) million (2019-20 £8.6 million). The main movement is due to an increase in the ILL provision last year, reflecting the outcome of a detailed study into the cost of decommissioning the site. There is a new provision for 2020-21 which is for the ISIS waste separation facility. This is for £21.2 million.

5.5 Other operating expenditure

| | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|--|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Revaluation - asset held for sale | - | - | (1) | (1) |
| Revaluation - Investment Property | (30) | (30) | 200 | 200 |
| Loss on disposal - assets held for sale | - | - | (17) | (17) |
| Profit on disposal - PPE | 59 | 59 | (10) | (10) |
| Loss on disposal - PPE | 34 | 34 | 554 | 554 |
| Profit on disposal of other investments | - | (5,288) | - | - |
| Share of profits on joint venture and associates | (4,999) | (4,999) | (4,000) | (4,000) |
| Share of losses on joint venture and associates | 31,515 | 31,515 | 40,006 | 40,006 |
| | 26,579 | 21,291 | 36,732 | 36,732 |

6. Taxation

| | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|--------------------------|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Current tax | 5,641 | 5,061 | 741 | 312 |
| Historic corporation tax | 868 | 868 | - | - |
| | 6,509 | 5,929 | 741 | 312 |

All tax charges relate only to corporation tax incurred by UKRI and Innovate UK Loans Limited in the normal course of business. Tax charges for 2020-21 include corporation tax charges for 2020-21 and an under accrual relating to 2019-20 of £1.1 million (increasing charges in the current year).

The historic corporation tax charge relates to the taxation due from predecessor bodies of UKRI.

The corporation tax charge for 2019-20 included an over-accrual of £2.3 million in relation to 2018-19 (reducing charges in 2019-20 comparatively), which was the first year of creation of UKRI and the first full year of operation of Innovate UK Loans Limited.

7. Property Plant and equipment

| | Land £000 | Buildings £000 | Plant, equipment, fixtures and fittings £000 | IT equipment £000 | Transport £000 | Assets under construction £000 | Total £000 |
|--------------------------|-----------------|-------------------|--|----------------------|-------------------|--------------------------------------|--------------------|
| Cost or Valuation | | | | | | | |
| At 1 April 2020 | 224,580 | 1,940,187 | 1,193,404 | 156,397 | 275,348 | 486,160 | 4,276,076 |
| Additions | - | 2,849 | 47,855 | 9,077 | 3,920 | 282,241 | 345,942 |
| Disposals | (5,734) | (40,372) | (22,433) | (44,956) | (465) | - | (113,960) |
| Transfers | 15,777 | 68,656 | 37,230 | 2,992 | - | (129,495) | (4,840) |
| Revaluation | 1,477 | (17,793) | 31,695 | 905 | 5,631 | - | 21,915 |
| Impairment | (131) | (319) | (9,705) | - | - | - | (10,155) |
| At 31 March 2021 | 235,969 | 1,953,208 | 1,278,046 | 124,415 | 284,434 | 638,906 | 4,514,978 |
| Depreciation | | | | | | | |
| At 1 April 2020 | (27,590) | (672,449) | (778,803) | (114,366) | (169,488) | - | (1,762,696) |
| Charged in period | (823) | (45,209) | (59,861) | (16,046) | (9,974) | - | (131,913) |
| Disposals | - | 23,718 | 22,349 | 44,951 | 465 | - | 91,483 |
| Transfers | - | (51) | 51 | - | - | - | - |
| Revaluation | 592 | 8,610 | (20,221) | (606) | (3,435) | - | (15,060) |
| Impairment | - | - | - | - | - | - | - |
| At 31 March 2021 | (27,821) | (685,381) | (836,485) | (86,067) | (182,432) | - | (1,818,186) |
| Net book value | | | | | | | |
| At 31 March 2021 | 208,148 | 1,267,827 | 441,561 | 38,348 | 102,002 | 638,906 | 2,696,792 |
| At 31 March 2020 | 196,990 | 1,267,738 | 414,601 | 42,031 | 105,860 | 486,160 | 2,513,380 |
| Asset financing: | | | | | | | |
| Owned | 156,652 | 1,252,980 | 441,561 | 38,348 | 102,002 | 638,906 | 2,630,449 |
| Finance leased | 51,496 | 14,847 | - | - | - | - | 66,343 |
| At 31 March 2021 | 208,148 | 1,267,827 | 441,561 | 38,348 | 102,002 | 638,906 | 2,696,792 |
| Cost or Valuation | | | | | | | |
| At 1 April 2019 | 197,938 | 1,901,973 | 1,240,653 | 172,436 | 324,102 | 365,652 | 4,202,754 |
| Additions | 1,167 | 2,688 | 33,358 | 9,881 | 1,864 | 167,551 | 216,509 |
| Disposals | - | (862) | (110,046) | (28,746) | (64,258) | (7,168) | (211,080) |
| Transfers | 13,755 | 17,262 | 10,853 | 2,826 | 5,007 | (39,874) | 9,829 |
| Revaluation | 11,720 | 19,126 | 18,591 | - | 8,632 | - | 58,069 |
| Impairment | - | - | (5) | - | - | - | (5) |
| At 31 March 2020 | 224,580 | 1,940,187 | 1,193,404 | 156,397 | 275,347 | 486,161 | 4,276,076 |
| Depreciation | | | | | | | |
| At 1 April 2019 | (7,200) | (646,459) | (800,092) | (122,468) | (217,164) | - | (1,793,383) |
| Charged in period | (744) | (39,802) | (59,916) | (18,565) | (11,278) | - | (130,305) |
| Disposals | - | 424 | 92,341 | 26,602 | 64,004 | - | 183,371 |
| Transfers | (22,020) | 22,073 | 41 | 65 | (151) | - | 8 |
| Revaluation | 2,374 | (8,685) | (11,177) | - | (4,899) | - | (22,387) |
| Impairment | - | - | - | - | - | - | - |
| At 31 March 2020 | (27,590) | (672,449) | (778,803) | (114,366) | (169,488) | - | (1,762,696) |
| Net book value | | | | | | | |
| At 31 March 2020 | 196,990 | 1,267,738 | 414,601 | 42,031 | 105,859 | 486,161 | 2,513,380 |
| At 31 March 2019 | 190,738 | 1,255,514 | 440,561 | 49,968 | 106,938 | 365,652 | 2,409,371 |
| Asset financing: | | | | | | | |
| Owned | 143,575 | 1,252,106 | 414,601 | 42,031 | 105,859 | 486,161 | 2,444,333 |
| Finance leased | 53,415 | 15,632 | - | - | - | - | 69,047 |
| At 31 March 2020 | 196,990 | 1,267,738 | 414,601 | 42,031 | 105,859 | 486,161 | 2,513,380 |

Included in Land and Building transfers is £51.29 million for bringing into service the new wharves at the Rothera and King Edward Point Antarctic bases (part of the RRS Sir David Attenborough associated projects), £30.16 million for bringing the Rosalind Franklin Institute Building into service and £20.61 million for reclassification of the land element of dwellings from the building to land categories.

Included in Assets under construction is £199.95 million (2019-20 £246.2 million) for the RRS Sir David Attenborough and associated projects, £79.67 million (2019-20 £46 million) for BBSRC institute work, £72.34 million (2019-20 £23.2 million) for National Satellite Test Facility construction, £51.95 million (2019-20 £15.77 million) for the London Institute of Medical Sciences, £39.32 million (2019-20 £22.60 million) for the Antarctic Infrastructure Modernisation Programme and £21.75 million for the ARCHER II Supercomputer project (2019-20 nil).

The former BBSRC land and buildings were professionally revalued during 2020-21 as at 31 January 2021 by Avison Young Limited, Chartered Surveyors, an independent valuer. Land and buildings were valued in accordance with the Royal Institute of Chartered Surveyors Valuation Standards (8th Edition), the "Red Book", and are prepared either on a Market Evidence or a Depreciated Replacement Cost basis.

During 2019-20, two institutes previously within UKRI became independent organisations. The National Oceanographic Centre (NOC) became independent on 1 November 2019 and the Centre for Ecology and Hydrology (CEH) became independent on 1 December 2019. Disposals included £21.1 million of Property, Plant and Equipment transferred to NOC and £6.1 million of Property, Plant and Equipment transferred to CEH on these dates.

During 2020-21, UKRI decided to switch the index used to revalue Land and Buildings from the Implied Output Price Indicator for New Construction: Other Public (OPI-OP) to the All-In Tender Price Index (TPI). This was because RICS issued guidance that the publication of some indices, including the OPI-OP, would likely become more volatile with limited data available due to the COVID-19 pandemic. After discussions were held with UKRI's expert valuer and assessing the various indices, it was decided the TPI was the most stable and more robust index.

The difference in valuation of Land and Buildings from changing indices, ranges from a decrease of £20 million using the new TPI index, as opposed to an increase of £12 million in using the previous OPI-OP index.

8. Intangible assets

| | Patents and Licences £000 | Software Intangibles £000 | Assets under construction £000 | Total £000 |
|--------------------------|------------------------------|------------------------------|--------------------------------------|------------------|
| Cost or Valuation | | | | |
| At 1 April 2020 | 329,632 | 139,570 | 4,657 | 473,859 |
| Additions | 52,958 | 1,523 | 3,387 | 57,868 |
| Disposals | - | (11,104) | - | (11,104) |
| Transfers | - | 4,381 | (4,381) | - |
| Revaluation | 1,511 | - | - | 1,511 |
| Impairment | - | - | - | - |
| At 31 March 2021 | 384,101 | 134,370 | 3,663 | 522,134 |
| Amortisation | | | | |
| At 1 April 2020 | (261,529) | (94,244) | - | (355,773) |
| Charged in period | (16,188) | (24,028) | - | (40,216) |
| Disposals | - | 11,104 | - | 11,104 |
| Transfers | - | - | - | - |
| Revaluation | - | - | - | - |
| Impairment | - | - | - | - |
| At 31 March 2021 | (277,717) | (107,168) | - | (384,885) |
| Net book value | | | | |
| At 31 March 2021 | 106,384 | 27,202 | 3,663 | 137,249 |
| At 31 March 2020 | 68,103 | 45,326 | 4,657 | 118,086 |
| Cost or Valuation | | | | |
| At 1 April 2019 | 316,559 | 123,609 | 6,374 | 446,542 |
| Additions | - | 23,730 | 2,371 | 26,101 |
| Disposals | - | (10,032) | (1,872) | (11,904) |
| Transfers | - | 2,263 | (2,216) | 47 |
| Revaluation | 13,073 | - | - | 13,073 |
| Impairment | - | - | - | - |
| At 31 March 2020 | 329,632 | 139,570 | 4,657 | 473,859 |
| Amortisation | | | | |
| At 1 April 2019 | (247,133) | (60,088) | - | (307,221) |
| Charged in period | (14,396) | (43,765) | - | (58,161) |
| Disposals | - | 9,617 | - | 9,617 |
| Transfers | - | (8) | - | (8) |
| Revaluation | - | - | - | - |
| Impairment | - | - | - | - |
| At 31 March 2020 | (261,529) | (94,244) | - | (355,773) |
| Net book value | | | | |
| At 31 March 2020 | 68,103 | 45,326 | 4,657 | 118,086 |
| At 31 March 2019 | 69,426 | 63,521 | 6,374 | 139,321 |

Additions of £52.9 million have arisen during 2020-21 due to a new patent being licensed.

9. Financial assets

| | Notes | 2021 UKRI £000 | 2021 Consolidated £000 | 2020 UKRI £000 | 2020 Consolidated £000 |
|-------------------------------|-------|----------------------|------------------------------|----------------------|------------------------------|
| Investments in joint ventures | 9.1 | 692,711 | 692,711 | 701,026 | 701,026 |
| Investments in associates | 9.2 | 23,780 | 23,780 | 24,847 | 24,847 |
| Other investments | 9.3 | 6,706 | 15,804 | 11,795 | 17,551 |
| Loans | 9.4 | 11,067 | 75,276 | 10,128 | 40,779 |
| | | 734,264 | 807,571 | 747,796 | 784,203 |

9.1 Investments in joint ventures

| | FCI £000 | DLSL £000 | ILL £000 | HSIC £000 | Other £000 | Total joint ventures £000 |
|---|----------------|----------------|---------------|---------------|---------------|---------------------------------|
| At 1 April 2020 | 299,319 | 320,248 | 44,218 | 35,744 | 1,497 | 701,026 |
| Additions | - | 21,806 | - | - | - | 21,806 |
| Transfers | - | 1 | - | - | - | 1 |
| Revaluation | (3,881) | (200) | (591) | - | - | (4,672) |
| Impairments | - | - | - | - | - | - |
| Share of joint venture profit/(loss) | (3,002) | (27,443) | - | 4,999 | (4) | (25,450) |
| At 31 March 2021 | 292,436 | 314,412 | 43,627 | 40,743 | 1,493 | 692,711 |
| At 1 April 2019 | 303,315 | 331,969 | 40,771 | 34,556 | 1,616 | 712,227 |
| Additions | - | 17,859 | - | - | - | 17,859 |
| Transfers | - | - | - | - | (115) | (115) |
| Revaluation | 8,152 | (1,331) | 3,447 | - | - | 10,268 |
| Impairments | - | - | - | - | - | - |
| Share of joint venture profit/(loss) | (12,148) | (28,249) | - | 1,188 | (4) | (39,213) |
| At 31 March 2020 | 299,319 | 320,248 | 44,218 | 35,744 | 1,497 | 701,026 |

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

The revaluation of investment in the Francis Crick Institute (FCI) relates to the adjustment required to account for differences in accounting policy between UKRI and FCI. The adjustment is taken to the revaluation reserve.

The Francis Crick Institute Limited (FCIL)

The Francis Crick Institute is a UK registered charity and limited company formed in partnership with Cancer Research UK, University College London, King's College London, Imperial College of Science Technology and Medicine and the Wellcome Trust. The Institute became operational on 1 April 2015. The entity is designed to allow the delivery of the scientific aims of the joint venture.

The Francis Crick Institute's objectives, as set out in its Articles of Association, are "the advancement of human health and education for the benefit of the public by the promotion and carrying out, directly and indirectly, of all aspects of biomedical research and innovation".

The funding of the project was via capital contributions leading to shares. The UKRI investment in the Francis Crick Institute Ltd is represented by issued shares. The investment is therefore valued under the equity method in accordance with the arrangements of IFRS 11 Joint Arrangements as a Joint Venture and additional disclosures regarding the investment are made under IFRS 12 Disclosure of Interests in Other Entities. The principal place of business is Midland Road, London. The proportion of share capital of The Francis Crick Institute that the UKRI holds is 41.9%.

Summarised financial information relating to the FCI is presented below:

| Summarised financial information | 2020-21 £000 | 2019-20 £000 |
|----------------------------------|-----------------|-----------------|
| Current assets | 78,819 | 55,631 |
| Non-current assets | 543,799 | 560,715 |
| Current Liabilities | (49,912) | (35,131) |
| | 572,706 | 581,215 |

| | | |
|--|---------|----------|
| Revenue | 167,089 | 162,167 |
| Profit/(loss) from continuing activities | (8,544) | (28,574) |

| Other financial information | 2020-21 £000 | 2019-20 £000 |
|-------------------------------|-----------------|-----------------|
| Cash and cash equivalents | 39,075 | 30,322 |
| Depreciation and amortisation | (38,813) | (38,608) |

| Other information | 2020-21 £000 | 2019-20 £000 |
|---------------------|-----------------|-----------------|
| Capital commitments | 1,284 | 2,527 |
| Grant commitments | - | - |

A lease dated 7th June 2012 between the original founders and the FCIL grants land at Brill Place, Camden, London (site of the FCI) to the FCIL. The lease term is for a period of 55 years at peppercorn rent. The land had been revalued by Powis Hughes, Chartered Surveyors at 31 December 2018. The valuation was carried out in accordance with RICS Valuation Manual, as amended in April 2010, known as the revised "Red Book", at Market Value. The MRC's interest in the land is recorded at £6 million (2020 £6 million) and reflected in the financial statements accordingly.

Diamond Light Source Limited (DLSL)

UKRI has an 86% 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 in natural sciences and engineering.

DLSL is a separate structured vehicle under the joint control of UKRI and the Wellcome Trust. UKRI 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.

UKRI holds 86% of the ordinary share capital and 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 UKRI'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 DLSL is presented below:

| Summarised financial information | 2020-21 £000 | 2019-20 £000 |
|--|-----------------|-----------------|
| Current assets | 36,579 | 30,384 |
| Non-current assets | 341,256 | 348,481 |
| Current Liabilities | (29,293) | (27,100) |
| Non-current liabilities | (59,581) | (56,269) |
| | 288,961 | 295,496 |
| Revenue | 76,225 | 74,647 |
| Profit/(loss) from continuing activities | (31,911) | (32,847) |

| Other financial information | 2020-21 £000 | 2019-20 £000 |
|-------------------------------|-----------------|-----------------|
| Cash and cash equivalents | 23,288 | 22,675 |
| Depreciation and amortisation | (34,175) | (36,146) |

| Other information | 2020-21 £000 | 2019-20 £000 |
|---------------------|-----------------|-----------------|
| Capital commitments | 6,972 | 6,841 |
| Grant commitments | 10,170 | 32,617 |

Institut Laue-Langevin (ILL)

UKRI 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. UKRI 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 UKRI 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 ILL is presented below:

| Summarised financial information | 2020-21 £000 | 2019-20 £000 |
|--|-----------------|-----------------|
| Current assets | 84,038 | 91,338 |
| Non-current assets | 500,922 | 530,268 |
| Current Liabilities | (49,574) | (55,721) |
| Non-current liabilities | (365,276) | (391,446) |
| | 170,110 | 174,439 |
| Revenue | 68,945 | 91,165 |
| Profit/(loss) from continuing activities | - | - |

| Other financial information | 2020-21 £000 | 2019-20 £000 |
|-------------------------------|-----------------|-----------------|
| Cash and cash equivalents | 41,444 | 49,029 |
| Depreciation and amortisation | (10,895) | (10,969) |

| Other information | 2020-21 £000 | 2019-20 £000 |
|---------------------|-----------------|-----------------|
| Capital commitments | - | - |
| Grant commitments | - | - |

Harwell Science and Innovation Campus Public Sector Limited Partnership (HSIC PubSP)

UKRI has a 41% (31 March 2020: 41%) interest in HSIC PubSP, a company incorporated and operating in the UK. Management and control of PubSP is jointly shared by UKRI 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 HSIC PubSP is to manage and develop the Harwell Campus as a partner in the Harwell Science and Innovation Campus LP alongside the private sector partner, Harwell Oxford Developments Limited.

Summarised financial information relating to HSIC PubSP is presented below:

| Summarised financial information | 2020-21 £000 | 2019-20 £000 |
|----------------------------------|-----------------|-----------------|
| Current assets | 24,317 | 26,786 |
| Non-current assets | 71,111 | 57,114 |
| Current Liabilities | (8) | (25) |
| Non-current liabilities | - | - |
| | 95,420 | 83,875 |

| | | |
|--|--------|-------|
| Revenue | - | - |
| Profit/(loss) from continuing activities | 12,194 | 3,090 |

| Other financial information | 2020-21 £000 | 2019-20 £000 |
|-------------------------------|-----------------|-----------------|
| Cash and cash equivalents | 24,315 | 24,373 |
| Depreciation and amortisation | - | - |

| Other information | 2020-21 £000 | 2019-20 £000 |
|---------------------|-----------------|-----------------|
| Capital commitments | - | - |
| Grant commitments | - | - |

UK Shared Business Services Ltd

UKRI 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 UKRI, each hold 1NGD share with a combined vote of 49%.

9.2 Investments in associates

| | 2021 UKRI | 2021 Consolidated | 2020 UKRI | 2020 Consolidated |
|-----------------|---------------|----------------------|---------------|----------------------|
| Opening balance | 24,847 | 24,847 | 21,526 | 21,526 |
| Transfers | (1) | (1) | 115 | 115 |
| Profit/loss | (1,066) | (1,066) | 3,206 | 3,206 |
| | 23,780 | 23,780 | 24,847 | 24,847 |

The UK Innovation & Science Seed Fund LP (UKI2SF)

The UKI2SF is an independently managed capital venture fund established to invest in technologies developed from publicly funded research. UKRI is a limited partner in the fund and has provided £10 million in total as a capital contribution to the fund.

Anglia Innovation Partnership (AIP) LLP (formerly Norwich Research Park (NRP) LLP)

BBSRC's investment of £833k in the AIP LLP is an equal share of a £2.5 million capital investment made by the three landowners of the NRP in 2011-12, (BBSRC, John Innes Foundation, and the University of East Anglia). The NRP LLP was formed between the NRP Partners – which consist of the three landowners, the Norfolk and Norwich University Hospital, the John Innes Centre, The Sainsbury Laboratory, and the Earlham Institute – with the aim of transforming the NRP into a world-leading centre for research and innovation in life and environmental science, as well as delivering significant economic benefits and growth in jobs, as a result of the government's £26 million capital investment in the facilities and infrastructure on the NRP. (<https://www.norwichresearchpark.com/>).

Babraham Bioscience Technologies Ltd (BBT)

UKRI currently holds 25% of shares in BBT, with a nominal value of £6.6 million, with the Babraham Institute holding the remaining 75% of the shares. This equity stake in BBT will ensure that £50 million government investment to date in the Babraham Research Campus facilities and infrastructure, and in any future developments, will deliver economic growth and job creation through creating an environment where life science businesses can focus on developing their science and building their business in a supportive and highly networked community, helping to create new medicines, jobs and growth, and maximising the impact of UK science. (<https://www.babraham.com/>)

Plant Bioscience Ltd (PBL)

110 ordinary shares at 10p each, representing one third of the issued share capital of PBL a company incorporated in England and Wales. www.pbltechnology.com

Rothamsted Centre for Research and Enterprise (ROCRE)

UKRI hold one ordinary share at 100p, representing 20% of the issued share capital (with voting rights) of Rothamsted Centre for Research and Enterprise Ltd (RoCRE). Lawes Agricultural Trust and Rothamsted Research each hold two ordinary shares, or 40 per cent, of the remaining issued share capital. RoCRE is incorporated in England and Wales. RoCRE's primary aim is to promote collaboration and innovation through partnering with commercial agricultural technology businesses and opening up the research process. www.rocre-rothamsted.com/

Leaf Systems International Ltd

30 ordinary shares at 100p each, representing 30% of the issued share capital (with voting rights) of Leaf Systems International Ltd. Leaf Systems International Ltd is incorporated in England and Wales and was launched in January 2017, following construction of the government-funded £5 million transitional facility at Norwich for producing high-value protein in plants. www.leafexpressionsystems.co.uk

9.3 Other investments

| | 2021 UKRI | 2021 Consolidated | 2020 UKRI | 2020 Consolidated |
|-----------------|--------------|----------------------|---------------|----------------------|
| Opening balance | 11,795 | 17,551 | 8,442 | 11,610 |
| Additions | - | 2,372 | - | 715 |
| Revaluation | (5,089) | (3,819) | 3,353 | 5,226 |
| Disposals | - | (300) | - | - |
| | 6,706 | 15,804 | 11,795 | 17,551 |

9.4 Loans

| | 2021 UKRI | 2021 Consolidated | 2020 UKRI | 2020 Consolidated |
|----------------------|---------------|----------------------|---------------|----------------------|
| Opening balance | 10,128 | 40,779 | 10,128 | 21,476 |
| Additions | 939 | 39,780 | - | 22,293 |
| Loans repaid | - | (1,190) | - | (1,000) |
| Expected credit loss | - | (4,623) | - | (1,990) |
| Amortisation | - | 1,897 | - | - |
| Fair value movement | - | (1,367) | - | - |
| | 11,067 | 75,276 | 10,128 | 40,779 |

9.4.1 Loans analysis

The loans are further split between Innovate Loans UK Limited (IUKLL) and a loan to Daresbury SIC LLP (DSIC), which is a joint venture between UKRI and Halton Borough Council. The interest on the loan is 3%.

| | UKRI | | | Consolidated | | |
|-------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| | DSIC £000 | IUKLL £000 | Total £000 | DSIC £000 | IUKLL £000 | Total £000 |
| At 1 April 2020 | 10,128 | - | 10,128 | 10,128 | 30,651 | 40,779 |
| Additions | 939 | - | 939 | 939 | 38,841 | 39,780 |
| Loans repaid | - | - | - | - | (1,190) | (1,190) |
| Expected credit loss | - | - | - | - | (4,623) | (4,623) |
| Amortisation | - | - | - | - | 1,897 | 1,897 |
| Fair value movement | - | - | - | - | (1,367) | (1,367) |
| At 31 March 2021 | 11,067 | - | 11,067 | 11,067 | 64,209 | 75,276 |
| At 1 April 2019 | 10,128 | - | 10,128 | 10,128 | 11,348 | 21,476 |
| Additions | - | - | - | - | 22,293 | 22,293 |
| Loans repaid | - | - | - | - | (1,000) | (1,000) |
| Expected credit loss | - | - | - | - | (1,990) | (1,990) |
| At 31 March 2020 | 10,128 | - | 10,128 | 10,128 | 30,651 | 40,779 |

Maximum credit risk exposure

The maximum credit risk exposure is calculated by adding the balance sheet carrying value of loans advanced (net of expected credit loss provisions) to the irrevocable loan commitments that are not yet advanced (so are not recognised on the balance sheet), less provisions on these commitments. The maximum credit risk exposure totalled £142.6 million at 31 March 2021 (2020 £57.2 million).

Staging & credit quality

UKRI's most substantial exposure to credit risk relates to the lending by its subsidiary Innovate UK Loans Limited (IUKLL). More detailed disclosure is available in the published statutory accounts of this subsidiary which will be approved by the IUKLL directors and will be made available on the Companies House website later this year.

The nature of innovation loans is such that this type of lending is expected to have a relatively higher credit risk profile compared to the lower risk commercial lending secured on a range of tangible and intangible assets at market interest rates that private sector financial institutions typically offer. IUKLL adopts robust credit risk management policies designed to recognise and manage the risks arising from the portfolio. At 31 March 2021 there were three innovation loans with a significant increase of credit risk and five loans that were credit impaired (defaults) (at 31 March 2020 there were three loans significant increase of credit risk and one loan with credit impairment (defaults)), as defined by the IUKLL's staging transfer criteria, at the end of the financial year.

The table below shows the loan balances and provisions for DSIC and IUKLL innovation loans, by risk grade.

Loan balance and provisions by risk grade

31 March 2021

| Risk grade | Loan balance | | | | Provisions | | | | % |
|--|------------------|------------------|------------------|----------------|------------------|------------------|------------------|----------------|---------------|
| | Stage 1 £'000 | Stage 2 £'000 | Stage 3 £'000 | Total £'000 | Stage 1 £'000 | Stage 2 £'000 | Stage 3 £'000 | Total £'000 | |
| DSIC non graded | 11,067 | - | - | 11,067 | - | - | - | - | N/a |
| Strong (AAA to A-) | - | - | - | - | - | - | - | - | - |
| Good (BBB+ to BBB-) | 8,026 | - | - | 8,026 | 103 | - | - | 103 | 1.28% |
| Satisfactory (BB+ to BB-) | 31,288 | - | - | 31,288 | 1,194 | - | - | 1,194 | 3.81% |
| Weak (B+ to B-) | 27,435 | 1,141 | - | 28,576 | 3,063 | 438 | - | 3,501 | 12.25% |
| Bad/Financial difficulties (CCC+ and below) | 897 | 449 | - | 1,346 | 103 | 127 | - | 230 | 17.09% |
| Default/credit impaired (D) | - | - | 2,531 | 2,531 | - | - | 2,531 | 2,531 | 100.00% |
| Total | 78,713 | 1,590 | 2,531 | 82,834 | 4,463 | 565 | 2,531 | 7,559 | 10.53% |

Loan balance and provisions by risk grade

31 March 2020

| Risk grade | Loan balance | | | | Provisions | | | | % |
|--|------------------|------------------|------------------|----------------|------------------|------------------|------------------|----------------|--------------|
| | Stage 1 £'000 | Stage 2 £'000 | Stage 3 £'000 | Total £'000 | Stage 1 £'000 | Stage 2 £'000 | Stage 3 £'000 | Total £'000 | |
| DSIC non graded | 10,218 | - | - | 10,218 | - | - | - | - | N/a |
| Strong (AAA to A-) | - | - | - | - | - | - | - | - | - |
| Good (BBB+ to BBB-) | 4,137 | - | - | 4,137 | 40 | - | - | 40 | 0.97% |
| Satisfactory (BB+ to BB-) | 14,855 | - | - | 14,855 | 511 | - | - | 511 | 3.44% |
| Weak (B+ to B-) | 10,780 | 987 | - | 11,767 | 879 | 106 | - | 985 | 8.37% |
| Bad/Financial difficulties (CCC+ and below) | 996 | 406 | 391 | 1,793 | 141 | 66 | 247 | 454 | 25.34% |
| Default/credit impaired (D) | - | - | - | - | - | - | - | - | - |
| Total | 40,986 | 1,393 | 391 | 42,770 | 1,571 | 172 | 247 | 1,990 | 6.11% |

9.5 Subsidiary Undertakings

STFC Innovations Limited (SIL)

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

SIL is consolidated in UKRI's financial statements in accordance with IFRS 10. In 2020-21 SIL recorded a loss of £5 million. Its net deficit of capital and reserves at 31 March 2021 was £4.9 million.

SIL has three subsidiaries of its own. These are Quantum Detectors Limited, Scitech Precision Limited and Formeric Limited.

Innovate UK Loans Limited

Innovate UK Loans Limited (IUKLL), a company registered and operating in the UK, is a wholly owned subsidiary of UKRI. IUKLL was incorporated on 22 February 2018 to implement a programme of innovation loans for the benefit of the UK economy in accordance with HM Government policy.

IUKLL is consolidated in UKRI's financial statements in accordance with IFRS10. In 2020-21 IUKLL recorded a loss of £0.5 million. Its net deficit of capital and reserves at 31 March 2021 was £4.3 million.

10. Funded Pension Scheme

The MRC operates a funded pension scheme (MRCPS) providing benefits based on service and final pensionable pay at the normal retirement age of 65. The scheme is a defined benefit scheme that prepares its own scheme statements. Benefits accrue at the rate of 1/80th of pensionable salary for each year of service. In addition, a lump sum equivalent to three years' pension is payable on retirement. Members pay contributions of between 6.0% and 6.5% pensionable earnings to the Scheme.

Following the transfer of MRC research units and employees to universities, a University section was set up to account for the obligations to individuals that remain in the MRCPS. During the period obligations of £6.9 million were recognised under Section 75 (S.75) of the 1995 Pensions Act in respect of liabilities of transferred employees; the University section, has been set up within MRCPS to manage S.75 liabilities. These costs are reflected in the valuation of the pension scheme.

The required MRCPS contribution rate is assessed every three years in accordance with advice of the Government Actuary. The latest actuarial assessment of the MRCPS was at 31 December 2019; it showed a surplus of £230.9 million (2016 valuation £160.3 million) and the market value of the assets of the MRCPS was £1,647 million (2016: £1,406m), an ongoing funding level of 116% (2016 valuation 113%). The actuarial value of the assets was sufficient to cover 116 per cent of the benefits that had accrued to members after allowing for expected future increases in earnings. Triennial valuations are conducted under the Pensions Act 2004 on a scheme specific funding basis. The present MRCPS employers' contribution rate remained at 15% in 2020-21 (2019-20: 15%).

The contributions due to the scheme are set out in the schedule of contributions for each section. The most recent schedules of contributions were signed on 21 December 2020 and are due to be reviewed following the next actuarial valuation of the scheme which is due to be carried out as at 31 December 2022.

The following payments are due in 2021-22:

MRC Section

By the members: 6.5% of pensionable pay

By MRC: 16.0% of pensionable pay

By other employers: 16.9% of pensionable pay

The total contribution expected to be paid into the MRC section in 2021-22 is £12 million.

University Section

By the members: 6.5% of pensionable pay

By the universities: 16.9% of pensionable pay

By MRC: 27.1% of pensionable pay

The total contribution expected to be paid into the university section in 2021-22 is £12 million.

As at 31 December 2019 the average maturity of the scheme as a whole was around 20 years.

The valuation used for IAS 19 disclosures has been based on the data for the most recent actuarial valuations as at 31 December 2019 and updated to take account of the requirements of IAS 19 in order to assess the liabilities of the scheme at 31 March 2021. The mortality assumptions included within the figures are that male and female members who retire at typical ages will live to approximately age 88 and 89 respectively.

a. Financial assumptions used to calculate scheme liabilities

| | 2020-21 % | 2019-20 % |
|--|--------------|--------------|
| Rate of increase on pensionable salaries | 3.40 | 3.00 |
| Rate of increase on pension payments | 2.40 | 2.00 |
| Discount rate | 2.00 | 2.30 |
| Inflation rate | 2.40 | 2.00 |
| Expected return on equities | 2.00 | 2.30 |
| Expected return on bonds | 2.00 | 2.30 |
| Expected return on overall fund | 2.00 | 2.30 |

The results of any actuarial calculation are inherently uncertain because of the assumptions which must be made. The table below indicates the approximate effects on the actuarial liability as at 31 March 2018 of changes to the main actuarial assumptions.

| Change in assumption | | | Approximate effect on total liability |
|---|-----|--------|---------------------------------------|
| Discount rate | -½% | +10.0% | +£174m |
| Rate of increase in earnings | -½% | -1.0% | -£23m |
| Rate of increase in pensions | -½% | -8.0% | -£125m |
| Removing age rate for pensioner mortality | | +4.0% | +£64m |

b. Analysis of Actuarial (loss)

| | 2020-21 £000 | 2019-20 £000 |
|---|-----------------|-----------------|
| Actual return less expected return on pension scheme assets | 331,243 | (99,022) |
| Experience gains arising on the scheme liabilities | 23,045 | 16,537 |
| Changes in demographic assumptions | 8,759 | 52,552 |
| Changes in financial assumptions | (216,992) | 95,726 |
| Actuarial gain | 146,055 | 65,793 |

c. Analysis of actuarial gain (loss) expressed as a percentage of the scheme's assets and liabilities at the statement of financial position date

| | 2020-21 % | 2019-20 % |
|---|--------------|--------------|
| Actual return less expected return on pension scheme assets | 17.36 | (6.33) |
| Experience gain/(loss) arising on the scheme liabilities | 1.38 | 1.13 |
| Actuarial gain | 8.78 | 0.90 |

d. The assets and liabilities in the scheme

| Assets | 2020-21 £000 | 2019-20 £000 |
|------------------------------|------------------|------------------|
| Equities | 1,172,934 | 903,909 |
| Property | 380,413 | 384,631 |
| Bonds | 288,554 | 218,461 |
| Cash | 65,882 | 56,287 |
| | 1,907,783 | 1,563,288 |
| Actuarial value of liability | (1,664,122) | (1,464,596) |
| | 243,661 | 98,692 |

Equities and bonds contain assets that have a quoted market price in an active market. As at March 2021, the value of those assets within equities is £697,801k and £174,279k within bonds.

An investment strategy is in place which has been developed by the pension trustee, in consultation with the Employer, to mitigate the volatility of liabilities, to diversify investment risk and to manage cash. To this end the majority of assets are invested in growth assets, which in the long term are expected to yield a greater return than would be available for fixed income assets such as bonds and gilts.

e. The movements in the scheme surplus

| | 2020-21 £000 | 2019-20 £000 |
|---|-----------------|-----------------|
| Surplus at the start of the period | 98,692 | 44,335 |
| Current service costs net of employee contributions | (33,788) | (37,439) |
| Employer contributions | 30,470 | 25,086 |
| Other finance income (note 10f) | 2,232 | 917 |
| Actuarial (loss)/gain (note 10b) | 146,055 | 65,793 |
| (Loss)/Surplus at end of period | 243,661 | 98,692 |

f. Other finance income

| | 2020-21 £000 | 2019-20 £000 |
|---|-----------------|-----------------|
| Expected return on pension scheme assets | 35,699 | 39,265 |
| Interest on pension scheme liabilities | (33,467) | (38,348) |
| Net return – other finance income (note 10e) | 2,232 | 917 |

11. Trade and other receivables

| | 2021 UKRI £000 | 2021 Consolidated £000 | 2020 UKRI £000 | 2020 Consolidated £000 |
|-------------------------------------|----------------------|------------------------------|----------------------|------------------------------|
| Re-presented | | | | |
| Due within one year | | | | |
| Trade receivables | 89,097 | 89,136 | 98,525 | 97,113 |
| Other receivables | 28,687 | 22,825 | 24,461 | 19,770 |
| Prepayments | 394,383 | 395,235 | 159,788 | 159,788 |
| Accrued income | 120,264 | 120,366 | 78,367 | 78,462 |
| Contract assets | 16,390 | 16,390 | 20,602 | 20,602 |
| Total receivables | 648,821 | 643,952 | 381,743 | 375,735 |
| Due after more than one year | | | | |
| Other receivables | 84,613 | - | 39,750 | - |
| Prepayments | 10,422 | 10,422 | 10,561 | 10,561 |
| | 95,035 | 10,422 | 50,311 | 10,561 |

Prepayments have significantly increased this year. Key Specific movement include:

- £120 million for Innovate UK grants due to the increase in grant activity and changes in terms and conditions for some grants made in response to COVID-19. The prepayments arose where payments have been made but full claims for the amount have not been made in year.
- £74 million increased prepayment recognised in 2020-21 in research and ODA grants relating to the increased impact of no cost extensions where grants have been reprofiled due to the delays in carrying out work because of the pandemic.

Accrued income has increased this year due to increased co-funding activity within Innovate UK in relation to the COVID response package and an increase in funding from other government bodies relating to programmes to help the UK to reduce carbon emissions.

UKRI estimates that approximately £85 million in relation to grants is included in both receivables and payables caused by:

- as part of Innovate UK's response to the COVID-19 pandemic R&D projects were paid a percentage of their grant award upfront. This payment was recognised as a prepayment pending submission of evidence of work. Consequently in calculating the year-end position for these projects the UKRI accounts reflect both an accrual and a prepayment. These values are reported gross within Notes 11 and 13 and have not been netted off; the total value to which this applies is approximately £69 million.
- Research Council grant projects where £16 million accruals were made at a project-level at year-end but where UKRI has made a calculated adjustment across its portfolio of grants to account for the increased volume of No Cost Extensions and impact on underlying grant activity as mentioned above.

The increase in UKRI parent receivables due after more than one year relates solely to the amount that is repayable from Innovate UK Loans Limited to UKRI, and the Parent comparative for Other receivables presented in 2019-20 (Nil) has been provided and is £39,750k.

12. Cash and cash equivalents

| | 2021 UKRI £000 | 2021 Consolidated £000 | 2020 UKRI £000 | 2020 Consolidated £000 |
|---|----------------------|------------------------------|----------------------|------------------------------|
| Balance at 1 April | 204,368 | 207,934 | 103,424 | 104,058 |
| Net change in cash and cash equivalent balances | 27,483 | 51,524 | 100,944 | 103,876 |
| Balance at 31 March | 231,851 | 259,458 | 204,368 | 207,934 |

The following balances at 31 March were held at:

| | 2021 UKRI £000 | 2021 Consolidated £000 | 2020 UKRI £000 | 2020 Consolidated £000 |
|-----------------------------------|----------------------|------------------------------|----------------------|------------------------------|
| Government Banking Service | 207,608 | 233,160 | 176,552 | 180,027 |
| Commercial banks and cash in hand | 24,243 | 26,298 | 27,816 | 27,907 |
| Total | 231,851 | 259,458 | 204,368 | 207,934 |

13. Trade and other payables

| | 2021 UKRI £000 | 2021 Consolidated £000 | 2020 UKRI £000 | 2020 Consolidated £000 |
|---|----------------------|------------------------------|----------------------|------------------------------|
| Amounts falling due within one year: | | | | |
| VAT | (723) | (691) | (21,635) | (21,606) |
| Other taxation and social security | (10,591) | (10,591) | (7,437) | (7,437) |
| Trade and other payables | (80,855) | (86,780) | (144,774) | (144,109) |
| Accruals | (237,498) | (238,009) | (156,280) | (157,917) |
| Grant accruals | (1,014,333) | (1,014,333) | (702,115) | (702,115) |
| Deferred income | (34,074) | (34,074) | (32,043) | (32,043) |
| Contract liabilities | (3,930) | (3,930) | (4,455) | (4,455) |
| | (1,382,004) | (1,388,408) | (1,068,739) | (1,069,682) |

Amounts falling due after more than one year:

| | 2021 UKRI £000 | 2021 Consolidated £000 | 2020 UKRI £000 | 2020 Consolidated £000 |
|----------------|----------------------|------------------------------|----------------------|------------------------------|
| Accruals | (130) | (130) | (3,191) | (3,191) |
| Grant accruals | - | - | (7,493) | (7,493) |
| | (130) | (130) | (10,684) | (10,684) |

The VAT payable decreased year on year due to a large VAT payable balance due in 2019-20 on historic VAT items.

The trade and other payables decreased year on year due to one of the former Research Councils falling into line with UKRI's Research Council grant payment run cycle, and so making its Q4 grant payment run in March rather than after 1 April.

The accruals balance increased due to an increase in the value of goods and services received by UKRI but not invoiced by our suppliers during 2020-21.

The year on year grant accrual increase was due mainly to £190 million growth in Innovate UK-delivered core programmes and ISCF Wave 3 programmes, along with the Sustainable Innovation Fund and Fast Start grants initiated in response to the impacts of COVID-19 on innovative businesses. There were also increases of £55 million in EPSRC core research grant accruals, £24 million for MRC grants relating to research in response to COVID-19 and £10 million relating to funding for the Francis Crick Institute.

UKRI estimates that approximately £85 million in relation to grants is included in both receivables and payables caused by:

- as part of Innovate UK's response to the COVID-19 pandemic R&D projects were paid a percentage of their grant award upfront. This payment was recognised as a prepayment pending submission of evidence of work. Consequently in calculating the year-end position for these projects the UKRI accounts reflect both an accrual and a prepayment. These values are reported gross within Notes 11 and 13 and have not been netted off; the total value to which this applies is approximately £69 million.

- Research Council grant projects where £16 million accruals were made at a project-level at year-end but where UKRI has made a calculated adjustment across its portfolio of grants to account for the increased volume of No Cost Extensions and impact on underlying grant activity as explained at Note 11.

14. Provisions for liabilities and charges

| | 2020-21 Consolidated £000 | 2019-20 Consolidated £000 |
|--------------------------------------|---------------------------------|---------------------------------|
| Balance at 1 April | 178,526 | 105,975 |
| Provided in the period | 19,843 | 73,715 |
| Provisions not required written back | (1,284) | (50) |
| Provisions increased in the period | (5,010) | (1,900) |
| Change in the discount rate | (52) | 5 |
| Unwinding of discount | 959 | 781 |
| Balance at 31 March | 192,982 | 178,526 |

Analysis of expected timing of cash flows

| | | |
|---|----------------|----------------|
| Not later than one year | 9,723 | 7,869 |
| Later than one year and not later than five years | 24,332 | 7,148 |
| Later than five years | 158,927 | 163,509 |
| Balance at 31 March | 192,982 | 178,526 |

Analysis of provisions

| | | |
|------------------|----------------|----------------|
| Decommissioning | | |
| ISIS | 72,971 | 54,757 |
| ILL | 93,610 | 100,887 |
| Other | 18,831 | 15,875 |
| Early retirement | 1,638 | 1,950 |
| Other provisions | 5,932 | 5,057 |
| | 192,982 | 178,526 |

The ILL decommissioning provision of £93.6 million (2019-20 £100.9 million) has been derived from UKRI's share of the provision disclosed in ILL's Financial Statements for the year ended 31 December 2020, produced in accordance with French accounting rules and principles. This provision has been calculated using a discount rate of 3.75% (2019: 3.97%). The provision is subject to a range of variables, the key ones being the methodology applied to estimate the total cost of decommissioning of the ILL facility.

End of Life (EoL) – no decision has yet been made on the EoL of the ILL facility. The timing of the EoL will both impact the start date of the overall decommissioning plan, and hence discounting of the value, and the overall cost since delivery of the decommissioning plan assumes preparatory actions have been taken. This is under active consideration by ILL.

Discount rate – if the HM Treasury PES (2021) discount rate for general provisions of 1.99% had been used, the provision would increase by £40 million. Exchange rate – a change of 10% in the EUR:GBP exchange rate is estimated to have an impact in the order of £10 million on the provision.

ISIS Decommissioning includes:

£44.6 million (2019-20 £46.5 million) for the estimated cost of decommissioning (including disposal of radioactive waste) of the ISIS Spallation Neutron Source facility. Decommissioning is expected to begin in 2040 and be completed in 2095.

£21.2 million (2019-20 £nil) for construction of a Waste Separation Facility (WSF) to handle the higher activity waste (HAW) produced by the ISIS facility. A significant proportion of ISIS waste is HAW which is the most expensive and difficult to prepare for disposal. The WSF will handle and segregate the waste to minimise the cost for transportation and disposal. Construction will begin in 2021-22 and take 5 years to complete.

ISIS Decommissioning provisions have been discounted to present value using discount (and inflation) rates provided by HM Treasury.

15. Adjustments for non-cash transactions

| | 2020-21 UKRI £000 | 2020-21 Consolidated £000 | 2019-20 UKRI £000 | 2019-20 Consolidated £000 |
|-------------------------------------|-------------------------|---------------------------------|-------------------------|---------------------------------|
| Depreciation and impairment charges | 182,489 | 187,111 | 188,669 | 190,659 |
| Capital grant of assets | 19,100 | 19,100 | 29,435 | 29,435 |
| Other operating expenditure | 26,371 | 20,555 | 35,819 | 35,819 |
| IAS19 Pension costs | 6,960 | 6,960 | 17,553 | 17,553 |
| Notional service charge | - | - | 24,517 | 24,517 |
| | 234,920 | 233,726 | 295,993 | 297,983 |

16. Commitments - Parent

16.1 Capital commitments

| | 2020-21 £000 | 2019-20 £000 |
|--|-----------------|-----------------|
| Contracted capital commitments at 31 March 2019 not otherwise included in these accounts: | | |
| Property, plant and equipment | 309,489 | 488,300 |
| Intangible assets | - | 389 |
| | 309,489 | 488,689 |

16.2 Grant commitments

| | 2020-21 £000 | 2019-20 £000 |
|---|------------------|-------------------|
| Not later than one year | 4,674,096 | 4,814,767 |
| Later than one year but not later than five years | 4,205,003 | 5,062,827 |
| Later than five years | 147,310 | 254,137 |
| | 9,026,409 | 10,131,731 |

16.3 International subscriptions

UKRI had the following commitments in respect of membership of international collaborations.

2020-21

| Organisation | Within one year £000 | Between one year and five years £000 | After five years £000 | Total £000 |
|--|-------------------------|--|--------------------------|----------------|
| European Organization for Nuclear Research (CERN) | 145,598 | 88,399 | - | 233,997 |
| European Spallation Source (ESS) | 22,118 | 53,836 | - | 75,954 |
| Institut Laue-Langevin (ILL) | 20,424 | 36,691 | - | 57,115 |
| European Synchrotron Radiation Facility (ESRF) | 9,197 | 36,138 | - | 45,335 |
| European Organisation for Astronomical Research in the Southern Hemisphere (ESO) | 27,448 | 13,996 | - | 41,444 |
| European X-Ray Free-Electron Laser Facility GMBH (XFEL) | 2,496 | 26,775 | 5,953 | 35,224 |
| Other | 19,986 | 3,268 | - | 23,254 |
| | 247,267 | 259,103 | 5,953 | 512,323 |

2019-20

| Organisation | Within one year £000 | Between one year and five years £000 | After five years £000 | Total £000 |
|--|-------------------------|--|--------------------------|----------------|
| European Organization for Nuclear Research (CERN) | 158,660 | 95,517 | - | 254,177 |
| Institut Laue-Langevin (ILL) | 19,655 | 60,379 | - | 80,034 |
| European Synchrotron Radiation Facility (ESRF) | 9,345 | 38,544 | 7,109 | 54,998 |
| European Organisation for Astronomical Research in the Southern Hemisphere (ESO) | 28,802 | 14,571 | - | 43,373 |
| European X-Ray Free-Electron Laser Facility GMBH (XFEL) | 2,400 | 22,000 | 14,000 | 38,400 |
| Other | 10,323 | - | - | 10,323 |
| | 229,185 | 231,011 | 21,109 | 481,305 |

17. Contingent liabilities

Prior to 31 March 2018, some staff at BBSRC strategically funded institutes were on BBSRC terms and conditions. Whilst their direct salary costs are paid by the institutes, BBSRC is liable for any exit costs for these staff. The date and number of staff to take exit packages in any one year is unknown; however, if all staff were to take exit packages, the maximum liability is estimated at £31 million, with the amount declining on an annual basis up to March 2025.

UKRI is responsible for Institut Laue-Langevin (ILL) staff related commitments and costs associated with reprocessing fuel elements. The contingent liability is estimated to be £10.4 million.

18. Related party transactions

UKRI is a non-departmental public body sponsored by BEIS. For the purposes of International Accounting Standard 24, BEIS is regarded as a related party. During the year UKRI have had various material transactions with BEIS and other bodies for which BEIS is regarded as the parent department, namely UK Space Agency and UK Atomic Energy Authority. In addition, UKRI also had a number of related transactions with UK SBS Limited.

UKRI had transactions with other government departments and with other central government bodies, such as:

Intellectual Property Office; the Foreign, Commonwealth and Development Office; Department for Environment, Food & Rural Affairs; Department of Health and Social Care; Department for Transport; and Ministry of Defence. UKRI also had transactions with devolved administrations, such as the Scottish Government and the Welsh Government.

The accounts provide disclosure of all material transactions with those who are recognised as key management personnel as per IAS 24 'Related Parties'. This is taken to be those members of staff who are included under Executive Directors' remuneration in the Remuneration and Staff Report and all UKRI Board members.

During the year UKRI entered into no new awards or contracts funded by UKRI where UKRI Board members or Executive Directors are the principal investigator.

The following aggregated payments were made by UKRI in respect of funded awards or contracts to Institutions where Executive Directors, Board members or their close family members were employed during the year:

| Organisation | Board Member or Director* (Relationship where involvement is not direct) | Position | Amount awarded (£) |
|--|---|------------------------------------|--------------------|
| British Academy | Sir Ian Diamond | Chair, Skills Committee | 8,137 |
| Cancer Research UK | Professor Sir Leszek Borysiewicz | Chairman | 4,872 |
| CERN (European Organization For Nuclear Research) | Professor Mark Thomson | UK delegate on CERN Council | 242,639,961 |
| Diamond Light Source Ltd | Professor Mark Thomson | Board Member | 83,493,180 |
| European Spallation Source | Professor Mark Thomson | UK delegate on ESS Council | 21,630,463 |
| Foundation for Science & Technology | Lord David Willetts | Chair | 83,640 |
| Francis Crick Institute | Lord John Browne of Madingley | Chairman | 54,598,616 |
| HM Treasury Group | Fiona Driscoll | Member Major Projects Review Group | 986,181 |
| King's College London | Professor Fiona Watt | Co-Investigator | 172,395,814 |
| Lancaster University | Sir Ian Diamond | Council Member | 69,947,271 |
| London School of Economics and Political Science | Julia Black | Strategic Director | 49,336,585 |
| National Institute of Economic and Social Research | Lord David Willetts | Governor | 71,205 |
| Sirius Constellation Limited | Lord David Willetts | Director and shareholder | 119,484 |
| The Courtauld Institute of Art | Lord John Browne of Madingley | Chairman | 5,285,070 |
| The Natural History Museum | Sir Peter Bazalgette (Spouse) | Board Member | 2,710,752 |
| The Royal Society | Sir Ian Diamond | Council Member | 386,560 |
| The University of Manchester | Harpal Kumar | Hon Chair in Cancer Sciences | 270,883,199 |
| University of Cambridge | Ottoline Leyser | Regius Professor | 401,440,344 |
| University of Leicester | Lord David Willetts | Chancellor | 89,850,353 |
| University of Oxford | Professor Dame Sally Davies | Non-executive Director | 396,630,082 |
| | Lord John Browne of Madingley | Senior Fellow | |
| University of Surrey | Professor Max Lu | President and Vice-Chancellor | 56,601,035 |
| Wellcome Trust | Professor Fiona Watt (Spouse) | Director | 16,203,337 |
| Zinc Ventures Ltd | Julia Black | Director | 536,851 |

UKRI also has related party transactions with its joint ventures; the Crick, DLSL, ILL, Daresbury SIC LLP, HSIC (PubSP), HSIC LP. These are disclosed in the table below:

| Joint Venture | Type of transaction | Transaction amount Expense/(Income) £000 | Balance Debtor/(Creditor) £000 |
|-------------------------|--------------------------------|--|--------------------------------------|
| Crick | Operations funding | 65,028 | 5,240 |
| DLSL | Sale of goods and services | (1,314) | 97 |
| | Purchase of goods and services | 325 | - |
| | Operations funding | 59,850 | (2,386) |
| | Purchase of shares | 21,806 | (2,297) |
| Institute Laue-Langevin | Operations funding | 19,571 | - |
| | Purchase of goods and services | 4 | - |
| | Sale of goods and services | (193) | - |
| Daresbury SIC LLP | Purchase of goods and services | 400 | - |
| | Loan notes interest | (617) | - |
| HSIC (PubSP) | Purchase of goods and services | 1,328 | - |
| | Sale of goods and services | (40) | 48 |

UKRI sponsors nine research institutes, which conduct long-term, mission-orientated research using specialist facilities that are in line with UKRI's priorities. UKRI provides Strategic Programme Grants to the institutes to fund specific research programmes. The sponsored institutes have separate charitable status, and an independent governing body oversees each of the institutes' activities.

Transactions with UKRI-sponsored Institutes

| | Type of transaction | Transaction amount Expense/(Income) £000 | Balance Debtor/(Creditor) £000 |
|--------------------------------|---------------------|--|--------------------------------------|
| Babraham Institute | Operations funding | 14,605 | (34) |
| The Pirbright Institute | Operations funding | 65,929 | - |
| Quadrum Institute Bioscience | Operations funding | 19,909 | (3,398) |
| John Innes Centre | Operations funding | 44,152 | (3,772) |
| Rothamstead Research | Operations funding | 24,939 | (522) |
| The Earlham Institute | Operations funding | 9,673 | (36) |
| UK Biobank Limited | Operations funding | 1,186 | 297 |
| UK Dementia Research Institute | Operations funding | 31,309 | 1,337 |
| Health Data Research UK | Operations funding | 28,793 | 5,351 |

Transactions with other related parties

| | Type of transaction | Transaction amount Expense/(Income) £000 | Balance Debtor/(Creditor) £000 |
|---|--------------------------------|--|--------------------------------------|
| LifeArc Limited | Operations funding | 2,127/(5,765) | - |
| Babraham Bioscience Technologies Ltd | Purchase of goods and services | 2 | 238/17 |
| Aberystwyth Innovation and Enterprise Campus Ltd | Purchase of goods and services | 78 | - |
| Anglia Innovation Partnership LLP (formerly known as Norwich Research Partners LLP) | Purchase of goods and services | 391 | - |
| Alan Turing Institute | Operations funding | 19,170/(4) | 480/(14) |

19. Financial instruments and derivatives

IFRS 7, Financial Instruments: Disclosures, requires disclosure of the role which financial instruments have had during the period in creating or changing the risks UKRI faces in undertaking its activities. Specifically: (a) the significance of financial instruments affecting financial position and performance; and (b) the nature and extent of risks arising from financial instruments to which it is exposed. Because of the largely non-trading nature of its activities and the way it is financed, UKRI is not exposed to the degree of financial risk faced by businesses. Moreover, financial instruments play a limited role in creating or changing risk on its operational activities.

Liquidity risk

UKRI's net revenue resource requirements are largely funded by the grant-in-aid from its sponsor department. The capital expenditure is also financed through the grant-in-aid. UKRI is therefore not exposed to significant liquidity risks.

Interest rate risk

UKRI has a low level of exposure to interest rate fluctuations; it does not actively seek to invest cash in money markets. Any excess funds held outside of the Government Banking Systems banking framework, which could attract interest, are maintained in low level current accounting arrangements, as part of its banking arrangements with Lloyds Banking Group.

Foreign currency risk

The council maintains US dollar, Euro and Swiss francs bank accounts in order to deal with day-to day transactions.

Foreign currency risk arises when UKRI enters into transactions denominated in a foreign currency. UKRI 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, UKRI 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 UKRI'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.

Therefore the risk attached to holding foreign currency denominations is not considered to be material.

Receivables and creditor risk

Financial assets and liabilities are held at fair value and changes in values are recognised in the Statement of Comprehensive Net Expenditure. The fair value of the council's financial assets and liabilities are equivalent to the carrying amount unless stated above. The council have limited powers to borrow or invest funds; financial assets and liabilities are generated by day-to-day operational activities and are not held to change the risks facing the council in undertaking its activities. Of current outstanding trade debt, 39% is greater than 30 days old. The majority of receivables are with other government bodies and research institutions, therefore the expected credit losses are not material.

20. Events after the reporting period

In accordance with the requirements of IAS 10 Events after the Reporting Period, post Statement of Financial Position events are considered up to the date on which the Accounts are authorised for issue. This is interpreted as the same date as the date of the Certificate and Report of the Comptroller and Auditor General.



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