

UK Space Agency Annual Report and Accounts 2018-19

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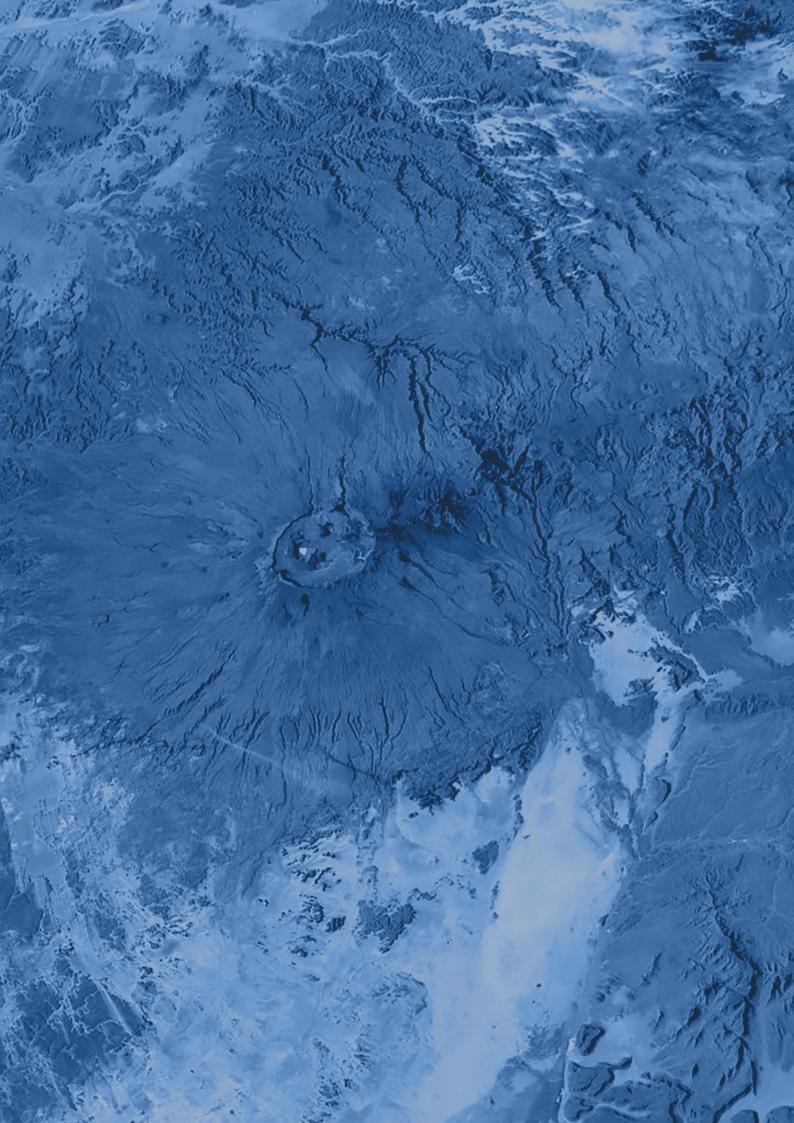
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CHIEF EXECUTIVE'S STATEMENT



I am delighted to introduce our Annual Report and Accounts for 2018-19.

This is an exciting time for the UK and space, not least because the UK is committed to develop a space flight capability. In July 2018, we confirmed funding for projects to launch satellites from a spaceport in Sutherland, Scotland, and funds to help develop the emerging market for spaceflight services from potential horizontal spaceports in places such as Newquay, Llanbedr, Prestwick and Campbeltown. The Agency has supported Londonbased firm OneWeb, which plans to use satellite connectivity to aid 5G technology communications, delivering worldwide internet coverage claimed to be more affordable with faster speeds than ever before. The first six satellites (of 650) were launched in February 2019.

In addition, the Agency continues to support science programmes. Recent science highlights have included the second data release of the Gaia astrometry mission that is providing the most accurate map of our Galaxy ever provided. The launch of BepiColombo in October 2018 was the start of a seven-year mission to Mercury and we've seen agreement to undertake a joint solar weather mission with China through our leading role in the SMILE mission. We are proud of the continuing UK success in the new science of Exoplanet discovery through leadership of the European Space Agency's (ESA) ARIEL programme. ARIEL's ability to extract spectral information on gases in exoplanets' atmospheres will rely on precise knowledge of 'lightcurves,' which describe the amount of light blocked by a planet as it transits in front of its parent star.

Looking to the future, we are keen to inspire the next generation of scientists and innovators, based on the UK's proud heritage in this area. Over the summer of 2018, we ran a competition to name the ExoMars rover, which received over 36,000 entries. In February, I joined the Minister, Chris Skidmore and British astronaut Tim Peake at the Airbus factory in

Stevenage for an event that unveiled the winning name. The rover will be called 'Rosalind Franklin' after the British scientist who played an integral role in the discovery of the structure of DNA. ExoMars is a two-part astrobiology project to search for evidence of life on Mars, therefore, giving the rover a name associated with a molecule fundamental to biology seems to be wholly appropriate.

EU Exit has presented a significant challenge, requiring a united response to prepare for negotiations and appropriate contingency plans in the event that the UK leaves the EU without a deal. In line with other departments, we have prepared the Agency for all potential outcomes and we will continue to provide support to the sector through the uncertainty over the coming period. As evidence of this, the UK Global Navigation Satellite System (GNSS) programme was established to examine options for the delivery of assured Position Navigation and Timing (PNT) services. A significant milestone was achieved in July 2018, when an Outline Business Case was approved providing funding of £92m for the programme Engineering Design and Development Phase (EDDP) which is a study to analyse the requirements, cost, design and schedule for the building and operation of a UK GNSS system.

The Agency remains committed to developing the UK space sector as a key element of the Government's modern and ambitious Industrial Strategy. The Size and Health of the UK Space Industry Report that was published in January 2019 highlighted that total UK space industry income had grown to be worth £14.8bn in 2016-17, a growth rate of 3.3% per annum. Employment in the UK space rose to 41,900 jobs in 2016-17; exports grew too (up to £5.5bn in 2016-17) with export intensity one third higher than the UK economy average.

I am confident that this Report will demonstrate the breadth of the work that the Agency is undertaking to Lead the New Space Age.

Graham Turnock

Chief Executive and Accounting Officer 25 June 2019

HIGHLIGHTS in 2018-19

The Agency was established to deliver civil space programme with the maximum economic, scientific and policy benefit for the UK. We have taken the strategic lead in the development and growth of the space sector in the UK – working to deliver real benefits to public services, science and innovation, national security and the wider economy. In 2018-19 this included the following:

Our investment in **Space Science programmes** has continued to support world-class science in the UK, keeping the UK at the forefront of discovery and providing economic benefits in stimulating technological innovation. Science highlights of the year included the second data release of the Gaia astrometry mission that is providing the most accurate map of our Galaxy ever provided, the launch of BepiColombo agreement to undertake a joint solar weather mission with China through our leading role in the SMILE mission and the continuing UK success in the new science of Exoplanet discovery through leadership of the ESA Ariel programme.

Our Synergetic Air Breathing Rocket Engine (SABRE) project with Reaction Engines Ltd passed a critical milestone towards the end of 2018 with the successful completion of the Preliminary Design Review by ESA.

We have engaged across Government and through the industry led Space Growth Partnership to formulate a new strategic approach to space interests. We have continued to engage closely with our partners in the European Space Agency to make investments that will underpin our strategy and we have expanded the network of regional ambassadors as part of our drive to promote the opportunity for the whole of the UK alongside our national efforts including the space incubation network. We developed new space standards activity to underpin our sector goals and we deepened our cross-government engagement on activity to underpin the industrial strategy and other policy aims such as tackling climate change.

To celebrate the 70th Anniversary of the foundation of the NHS, we ran a £4m call for ideas using satellite applications and technologies to drive

innovation in the NHS. Our Satelife call to engage young people in the benefits of space to everyday life inspired strong interest and the next generation of space entrepreneurs. We procured operational and strategic support for UK activity in the International Disaster Charter, a global effort to tackle humanitarian and natural emergencies. We also procured access to high resolution data to use for research and innovation in dealing with public sector challenges as part of our Space for Smarter Government Programme.

The Agency has expanded its own international policy team to ensure **capacity to respond to the challenges of the UK leaving the EU**, and an increasing appetite for international engagement.

Our presence has been strengthened internationally; this year saw increased talks with the US government; with China where the Agency took a lead role at the 13th UK/China space conference; with Japan, especially in the area of space security; and we signed a memorandum of understanding to provide a framework for increased collaboration with Australia.

This year was an exciting year for our programme of work with **European Space Agency**, including the Earth Observation mission, Aeolus, which used key UK instruments.

The UK Global Navigation Satellite System (GNSS) programme was established to examine options for the delivery of assured Position Navigation and Timing (PNT) services.

We have continued support for **education and outreach** through a focus on teaching resources, continued professional development for teachers,

and direct interventions with students which has totalled over 140,000 direct engagements overall. We have also built support at higher levels through the space placements in industry programme, apprenticeships scheme, and scholarships to attend the International Space University's Space Studies Programme.

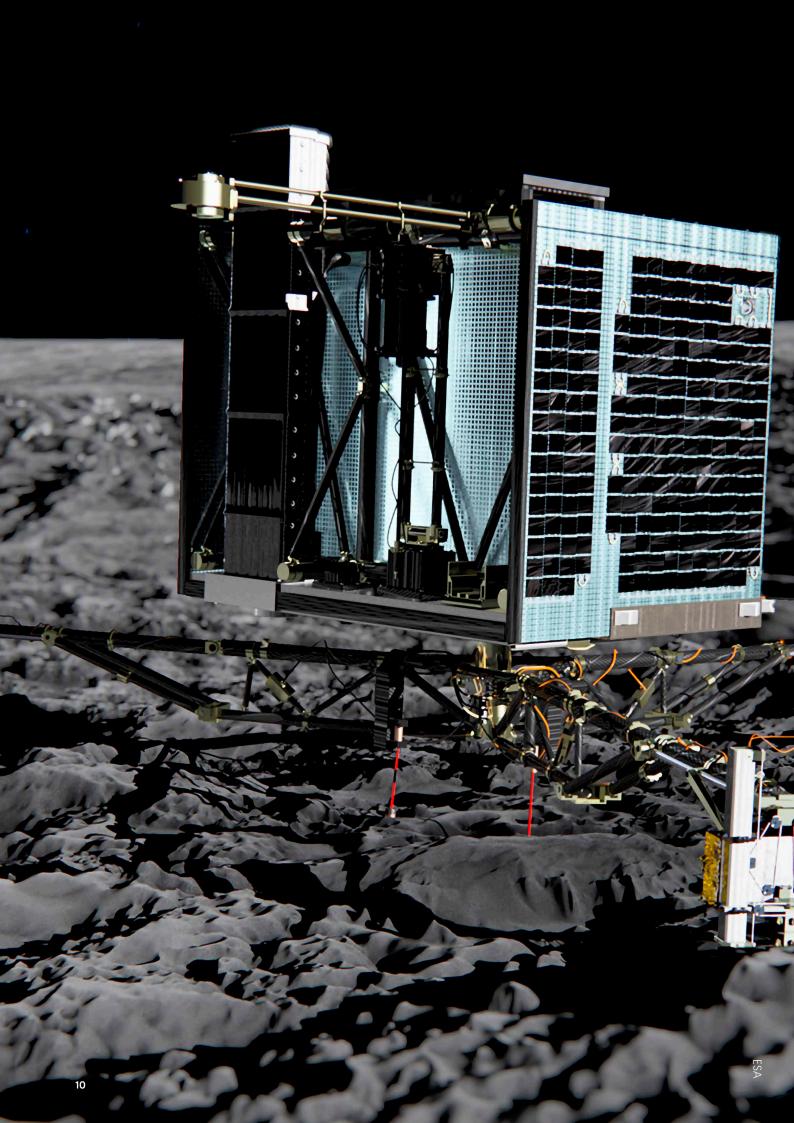
We have further developed our understanding of the **cross-sector dependencies on space**, working with industry, academia and other Critical National Infrastructure (CNI) leads. This has formed a foundational element of the work ongoing to define the process for declaring and managing a CNI space asset.

The Space Industry Act of March 2018 is a major step towards establishing a safe and supportive **regulatory framework to enable launches** to take place from the early 2020s. Work in close partnership with the Civil Aviation Authority and Department for Transport has been progressing at

pace this year to develop the detailed regulations to implement the Act. In parallel, we have progressed the development of a new regulatory function as required under the Act, aligning this with the development of secondary legislation. Consultation on regulations and guidance is due next year, and a new regulator will be in place to receive applications for licences once the secondary legislation has passed through Parliament.

In July, we awarded £31.5m for **projects to launch satellites** from a spaceport in Sutherland, Scotland, alongside a £2m fund to help develop the emerging market for spaceflight services from potential horizontal spaceports. This year, we have also supported studies exploring options to deliver the range services that will support safe spaceflight operations, and a new education programme that will use spaceflight to inspire the next generation of scientists, engineers and entrepreneurs.





ABOUT THE UK SPACE AGENCY

The UK Space Agency (the Agency) is an executive agency of the Department for Business, Energy & Industrial Strategy (BEIS). It was created in 2011 to deliver an excellent space programme with the maximum economic, scientific and policy benefit for the UK. We deliver a targeted programme of research and development, innovation and science funding and oversight to drive economic growth through exploitation of space infrastructure, services and data.

We are responsible for:

- space strategy and policy development, including representing the UK at international level on global issues;
- investing in the sector and delivering national programmes; and
- regulating UK space activities, including emerging markets like spaceflight and in-orbit proximity missions.

We currently employ over 200 staff. This includes secondees from other government departments and industry providing additional subject matter skills, knowledge and expertise. Our staff are based in Swindon, London and the Harwell Campus near Oxford. We will continue to invest in organisational development to ensure we have the right people and capability. More information is set out in the 'Our People' section.



WHAT COULD STOP US ACHIEVING OUR OBJECTIVES?

Risk management is about identifying risks that could occur, deciding what activity is required to influence the chance of them happening, and then managing that activity. In achieving our objectives, we will inevitably expose ourselves to risk, in the form of negative threats, or positive opportunities and we must ensure that we maintain control over our risk exposure as much as practicably possible.

Therefore, we have established guidelines and criteria that allow us to formalise the way in which we identify, assess, address, record and review our risks. Our risk management is conducted at three levels, with escalation/de-escalation between them when appropriate:

- Projects/Programmes (Risks that may impact on project/programme objectives)
 Project and programme managers populate risk registers and use these to inform regular conclusions around the status of their projects and programmes.
- Directorate Risks (Risks that may impact on delivery of Directorate objectives)
 Directors review their Directorate Risk Registers monthly, considering the Agency's risk appetite and providing advice and guidance on appropriate actions as required.
- Corporate Risk Register (Risks that may impact on delivery of Agency objectives)
 The Executive Board assess the Corporate Risk Register monthly. Audit Committee and Steering Board review the Corporate Risk Register at each of their meetings.

Our Executive Board recognises that it may not be possible to fully eliminate risk. Indeed, it may not be economically viable to do, therefore we need to understand the amount of risk that we are prepared to accept before we take action i.e. our **risk appetite**.

Our risk appetite is as follows:

- Financial Exposure Our appetite is 'cautious'.
 We will only tolerate financial risks which are
 rated as low or below and may choose to
 mitigate some of these.
- Delivery Overall our risk appetite is 'open'. We accept that delays are sometimes unavoidable.
 In most cases we are comfortable for these to be managed but should there be indications of a substantial delay to delivery, a risk must be mitigated.
- Reputation Our risk appetite is currently 'open'. Sometimes it is necessary to be innovative and ambitious with our policies. We cannot achieve this if we are restricted in our thinking by an overly cautious approach to risk taking. However, we have a 'minimalist' appetite for actions from anyone in the Civil Service which could reflect on the Agency negatively.
- Legal Our risk appetite is 'adverse'. We will not pursue actions which are plainly unlawful and cannot be supported by a respectable argument.
- Information Our risk appetite is 'minimalist' due to the sensitive commercial information being shared by our key industry partners.

Our corporate risks are those that capture the effect of uncertainty on the achievement of our strategic plans; or those that have serious legal, financial viability or reputational implications for the Agency. Our key Corporate Risks at 31 March 2019 were:

Adverse Impact on Sector Resilience - Potential or actual loss of access to EU programmes; restrictive migration policy might limit availability of EU talent; potential rise in customs charges/tariffs, and potential delays at the border.

Licensing Process - The Outer Space Act (OSA) licensing and monitoring process is insufficiently robust.

Failure to deliver the Spaceflight Programme - If the programme is delayed or curtailed it will result in reputational damage to Government from a failure of national space policy.

Poor Project Performance – Cancellation or Projects that fail to deliver may result in nugatory spend (cancellation), reduced value for money, delivery slippage, benefit reduction and undermine future case for investment.

Resources - There is a risk the Agency is unable to deliver agreed outputs from within its financial allocation.

Reputational Damage - service/process failure -

The Agency not operating professional services and processes which may lead to reputational damage.

EU Exit No Deal - The UK leaves the EU without a deal on 12 April 2019.

GNSS - The UK GNSS Programme manages over 200 risks through its dedicated Risk Register, in addition to technical risks managed within the current projects. The following risks are the high priority risks currently being mitigated by the programme: procurement delays, concern around succession planning and challenges to UK GNSS operations.

Appetite Definitions

Averse

Avoidance of risk and uncertainty is a key organisational objective.

Minimalist

Preference for ultra-safe business delivery options that have a low degree of inherent risk and only have a potential for limited reward

Cautious

Preference for safe delivery options that have a low degree of residual risk and may only have limited potential for reward.

Open

Willing to consider all potential delivery options, tolerate moderate risk, and choose the one that is most likely to result in successful delivery while also providing an acceptable level of reward (and value for money etc).

Bold

Eager to be innovative and to choose options offering potentially higher business rewards, despite greater inherent risk.

OUR FINANCES

A key Agency financial objective is to outturn between +0% and -1% of the financial target.

In compliance with the BEIS budgeting regime, the Agency was required throughout the year to advise the department of its total forecast net expenditure for the year end, in line with the requirements from HM Treasury to adhere as closely as possible to the forecast.

The Agency's 2018-19 final Departmental Expenditure Limit (DEL) outturn, excluding EU Exit ring fenced budgets and Annually Managed Expenditure (AME), was £3.629m (equivalent to 1%) below the agreed financial target. Significant variances in ring fenced budget outturn saw EU Exit GNSS underspend as a result of taking longer than expected to place key

contracts for the EDDP, and National Productivity Investment Fund (NPIF) underspend as a result of an increased timeframe required to secure spaceflight approval.

The table below includes the details of the budget, financial target agreed with BEIS and outturn against each ring-fenced budget line. The reported variance is the difference between outturn and agreed financial target. The Agency's financial objective only applies to DEL budget lines as movements in the AME budgets are outside the control of management.

	2018-19			
	Budget £000	Agreed financial target £000	Outturn £000	(Surplus)/ Deficit £000
Admin DEL	3,850	3,850	3,796	(54)
Programme DEL	185,845	185,845	184,110	(1,735)
Capital DEL	135,398	135,398	133,688	(1,710)
Global Challenges Research Fund	30,000	27,640	27,835	195
National Productivity Investment Fund	18,400	7,560	7,236	(324)
Total DEL	363,493	360,293	356,664	(3,629)
EU Exit - GNSS ring fenced budget	50,000	23,800	14,766	(9,034)
EU Exit	2,949	2,585	2,662	26
Total EU Exit	30,326	26,385	17,428	(8,957)
Non-ring-fenced AME	864	1,212	1,226	14
Ring-fenced AME - forward contract revaluations	(25,000)	(25,000)	27,353	52,353
Total AME	(24,136)	(23,788)	28,579	52,367

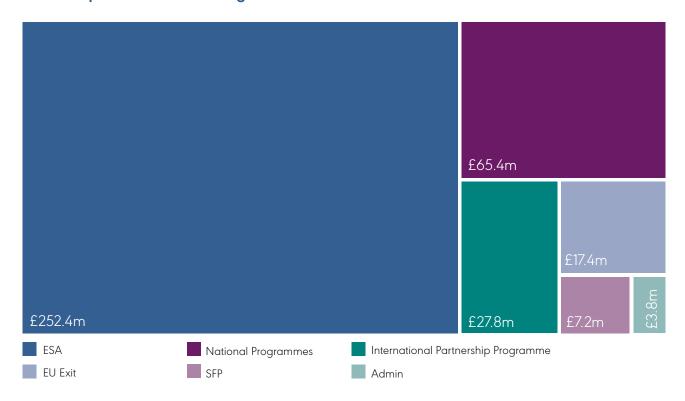
Foreign exchange hedging impact of new ESA commitments

In December 2016, at the ESA Council of Ministers meeting, the Agency committed over €1.4 billion to ESA for the period of 2017 to 2019, with some commitments stretching to 2021. To aid budgetary certainty, the Agency manages a portfolio of foreign exchange forward contracts. In 2018-19 the portfolio consisted of 19 contracts, six of which matured during the year. These financial instruments are subject to significant variances in their underlying

fair value as measured at 31 March 2019, which resulted in a recognised notional revaluation loss of £27.4m. These movements are outside the control of management and are therefore classified as AME.

More information about the forward exchange contracts can be found in Note 6 to the Financial Statements, Other financial assets and liabilities, on page 86 and Note 11.1. Other financial commitments, on page 89.

How we spent our 2018-19 budget



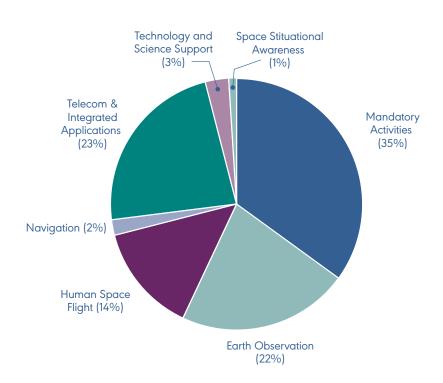
The table above includes delivery costs so the figures are not directly comparable to those in the Note 4 to the Financial Statements, Total Expenditure, on page 85.

European Space Agency

During the reporting period, the Agency subscriptions to ESA totalled £252.4m (2017-18: £293.2m). The Agency's commitments to ESA are agreed at Council of Ministers meetings, scheduled

every two to four years. The most recent meeting was held in December 2016 and the next one will take place in November 2019. The medium-term commitment of ESA contributions was agreed at the Council of Ministers 2016 and covered subscriptions up to the end of 2019.

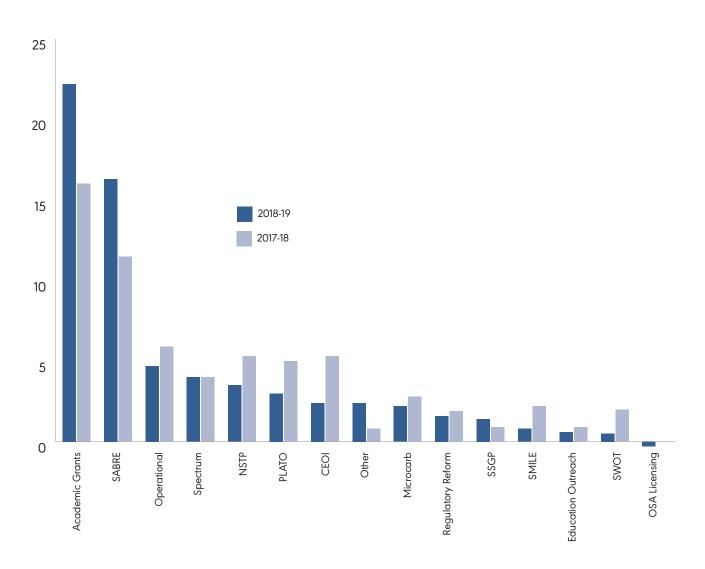
The current subscriptions portfolio can be summarised into seven key categories shown below.



National Programme

Including delivery costs, a total of £65.4m (2017-18: £64.5m) was spent on the National Programme during the reporting period covering a multitude of different projects and initiatives. The Agency received

income of £306k during 2018-19 in respect of its OSA licensing activities. 2018-19 spend on National Programmes, including prior year comparatives can be summarised below.



Admin

Despite the increased size of the Agency, admin outturn remained at £3.8m (2017-18: £3.8m).

EU Exit

Following the UK's decision on 23 June 2016 to exit the EU, the Agency has spent £17.4m during the reporting period (2017-18: £3.1m). The increased spend from previous year was largely driven by the GNSS programme.

Net Assets

Net assets as at 31 March 2019 were £38.7m, a decrease of £53.2m from £91.9m as at 31 March 2018. This is predominantly due to a decrease in the fair value of forward exchange contracts.

Cash

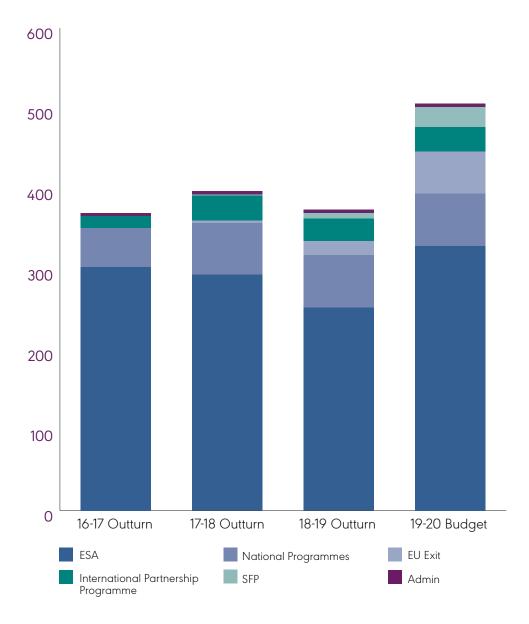
Cash balances are closely managed on a monthly basis to meet the internal and departmental cash requirements. All cash reserves are held within the Government Banking Service. The Agency does not hold any commercial bank accounts.

The cash balance as at 31 March 2019 was £11m (2017-18: £12.9m). The Agency aims to maintain an adequate cash balance at any point in time.

Spending Review 2015 expenditure trend

The Agency was created in April 2011, and to 31 March 2019 overall direct programme funding has risen from approximately £250m to £400m per financial year. The additional funding has allowed the Agency to expand its subscriptions to ESA, increase its funding to the national programme and resource space programmes related EU Exit activities. Due to the nature of space science, expenditure on such programmes is managed across multi-year profiles.

The graph below shows the historic expenditure trend based on the Spending Review (SR) 2015 settlement covering the period from 2016-17 to 2019-20, and the relative share of the overall allocation across ring-fenced budgets. Future funding will be confirmed as part of the BEIS SR2019 settlement, due for announcement later this year.



OUR PEOPLE

The Agency's most important resource is its people and we continually aim to ensure that we have the right people in the right place with the right skills and support. In the 2018 Civil Service People Survey (CSPS), we obtained an employee engagement index (EEI) of 54%. This was down 1% from the previous survey. The EEI is shaped by five individual questions as well as measuring responses to nine key themes as shown in the chart below.

People Survey Results			
	2018 Result	2017 Result	Diff ±%
My Work	78%	82%	-4%
Organisational Objectives and Purpose	64%	60%	+4%
My Manager	64%	63%	+1%
My Team	80%	80%	0%
Learning and Development	40%	52%	-12%
Inclusion and Fair Treatment	72 %	73%	-1%
Resources and Workload	62%	59%	+3%
Pay and Benefits	27%	17%	+10%
Leadership and Managing Change	37 %	41%	-4%
EEI Index	54%	55%	-1%

The % figure above represents the positive number of responses to the theme by year and then the difference between surveys. So, for example, in 2018 for My Work, 78% of the respondents declared that they either strongly agreed or agreed with the theme questions. This was a reduction of 4% from the previous year.

In order to strengthen our approach to people and improve our EEI, we created a new Organisational Development Directorate in February 2019. To support this, we have recruited a new Head of HR role to ensure we are embedding best practice in all our people matters and a new Director of Organisational Development to give greater focus to people, capability and change at Executive Board.

To further respond to the results of people survey and to effect positive change in the Agency, we have reinvigorated our People Group and are developing a 2019-20 People Plan focused on:

- Improving as an Agency in response to continuous feedback from staff.
 - Leadership and managing change.
 - Learning and career development.
 - Fair treatment and inclusion.
- Ensuring our HR policies and procedures are as efficient and effective as possible.
 - Performance management and reward.
 - Recruitment and resourcing.
- Engaging staff and measuring organisational improvement.

For the 2019 CSPS, the Agency will, for first time, be measured as an entity in its own right, rather than as a subset of the Department for Business, Energy and Industrial Strategy. We look forward to analysing the outcomes and taking appropriate actions arising.



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HOW WE HAVE PERFORMED

The Agency set challenging targets for its delivery in 2018-19, performance against these targets was measured monthly through detailed performance reports – which were analysed by our Executive Board and scrutinised by our Steering Board, Audit Committee and BEIS sponsor team every quarter.

In our 2018-19 Corporate Plan, we detailed five KPIs which were the priorities for the 2018-19 financial year.

A summary of the performance against each KPI is shown in the table below with a red/amber/green rating given as at 31 March 2019.

In addition to the KPIs below, the Agency has continued to work closely with the Department for Exiting the EU and other Government Departments to achieve the best possible outcome for the UK space sector following the 2016 vote to leave the European Union. The Withdrawal Agreement and Political Declaration reflect the UK's ambition to participate in EU Space Programmes where they meet UK requirements and provide value for money.

The current offer from the European Commission falls short of what the UK would consider acceptable terms for Galileo participation. That is why the UK Government announced a £92m investment to explore potential options for a UK Global Navigation Satellite System.

Any negotiation of future participation will take place once the Withdrawal Agreement has been ratified. The Agency has undertaken a range of preparations both for potential future negotiations and the potential of leaving the EU without a deal. These activities are in an advanced stage, and the Agency stands ready to support the Sector and wider Government in all eventualities.

KPI Status **Summary** Satellite Launch Programme (now called Market Engagement: Following business case Spaceflight Programme) approval, in July 2018 the Secretary of State We will grow the UK space economy by for BEIS, Grea Clark, announced that the enabling and encouraging businesses to build Agency would provide £31.5m in grant funding a safe and sustainable commercial market to support small satellite launch from a new for small satellite launch and sub-orbital spaceport at Sutherland, comprising: spaceflight from UK spaceports. • £2.5m to Highlands and Islands Enterprise Success Measures (HIE) to develop the spaceport; Update the UK space sector on work to • £23.5m in two separate grants to Lockheed deliver the UK's launch ambition by end of Martin to establish launch operations quarter 2. Complete business case and, if at Sutherland and to build an orbital approved, commence delivery of funded manoeuvring vehicle in Reading; projects by end of quarter 4. Complete a • £5.5m to Orbex towards development of a series of engagements with US and European new rocket for launch from Sutherland. governments to discuss UK launch plans by end of quarter 4. He also announced £2m, subject to business case approval, to help horizontal spaceports build the market for small satellite launch and sub-orbital flight. This will accelerate the development of a UK spaceflight market which attracts other operators to develop and deliver small satellite launch services and sub-orbital flights from a number of UK spaceports. Grant letters were issued in July 2018 following business case approval in June 2018. In February 2019, the UK Space Agency awarded over £350,000 for the development of commercial range control services at multiple spaceport sites across the country. **International Engagement:** We are working with the US towards a bilateral Technology Safeguards Agreement, which will establish the technical and legal safeguards for US space launch vehicle operations from UK launch sites. The UK and US are also exploring ways in which US companies can participate in activities at UK commercial spaceports. Equally, we have been actively engaging with other countries who will have an interest in launch activities from the UK. Safety, security and protection of the environment in the context of launch activities are a top priority for

> the UK Government - as laid out in the Space Industry Act - and this approach will inform our

discussions with neighbours.

KPI	Status	Summary
Space Sector Growth We will work to continue to grow the UK space sector which is at the heart of the Industrial Strategy. We will publish an updated Civil Space Strategy which will highlight key opportunities for future sector growth and areas for priority investment. In conjunction with the Space Growth Partnership, the Agency		Working across key Government departments and with industry and the sector through our role on the Space Growth Partnership Board, the Agency formulated a different approach to future civil space strategy, to the governance of the sector and to the partnership with industry during 2018-19.
will finalise an Industrial Strategy Sector Deal, ensuring this aligns with agreed industry and Government plans. Success Measures		This whole of government approach which we anticipate will be implemented in 2019-20 aims to strengthen collaboration, maximise resources and ensure clear strategic direction and priorities for the sector.
Secure agreement across government to a Civil Space Strategy by end of quarter 2. Prepare proposals for Space Sector Deal with Industry by end of quarter 2.		This KPI carries a red rating as neither a Sector Deal was published, nor the Civil Space Strategy updated. Following a BEIS announcement on 4 June 2019, the focus is now on a cross Government National Space Framework and the establishment of a National Space Council.

KPI Status Summary

Space Regulation and Regulatory Reform

We will execute our existing regulatory responsibilities efficiently and effectively and maintain the pace of reform of the UK's regulatory regime to deliver safe and sustainable commercial growth in the space sector, whilst protecting the space operating environment and managing Government's long-term risks.

Success Measures

Implement improvements to the requirements for third-party liability insurance for in-orbit operations by end of quarter 2. Streamline current licencing processes by fully implementing a traffic light system for all new prospective applications by end of quarter 2. Develop proposals for regulation of new types of mission by end of quarter 4. Continue to develop the legislative basis and licencing regime for UK launch.

Third-party liability insurance: We have introduced a new 'sliding scale' policy for licensees' in-orbit third-party liability insurance requirements. For missions such as a low-risk satellite deployed from or operating below the International Space Station this insurance requirement may be reduced or waived. On the other hand, it is likely that operators planning higher-risk missions will need to hold a greater level of insurance than that required

for standard missions. This new approach

should also make it easier for operators to

satellites.

procure insurance for large constellations of

Traffic-light system: We introduced a traffic-light licencing system. This is a new preapplication process to give prospective applicants an early indication of how likely it is that their mission would be granted a licence and, depending on the mission, can result in a streamlined application process.

Proposals for new types of mission: We have developed draft proposals for regulation of close proximity missions. These are being tested across the Agency and with external stakeholders, including international stakeholders. We will look for ways to enable missions, for example in orbit servicing, in due course.

Continue to develop the legislation and licencing regime for UK launch: Work in close partnership with the Civil Aviation Authority and Department for Transport has been progressing at pace this year to develop the detailed regulations to implement the Space Industry Act 2018 and progress the development of a fit-for-purpose regulator, as required under the Act. Sixteen policy instructions for 20 work strands have been completed and drafting of regulations is well underway, and substantial recruitment activity to develop and staff the new regulator has taken place. Consultation on regulations and guidance is due next year, and the new regulator will be in place to receive applications for licences once the secondary legislation has passed through Parliament.

KPI Status **Summary** All Programmes were delivered within time and **Space Programmes** We will oversee the performance, funding and cost parameters. Space Science: BepiColombo was launched risks in delivering the Agency's national and in October 2018 on its 7-year journey to international programmes to derive maximum Mercury with the UK led x-ray imager onbenefit. We will manage and monitor delivery board. UK industry also developed the ion of the UK government's strategic (civil) propulsion systems which are now propelling programmes in space science, exploration, the spacecraft so that it will not be pulled technology, research and development and into the sun. Following an initial 2-year study, innovation. new funding was secured to develop the flight instrument for SMILE - an ESA/Chinese Success Measures collaboration to study how the solar wind Monitor the performance of all projects to interacts with the Earth's magnetosphere. On assure that they are within approved time and Solar Orbiter, the remaining UK instrument cost parameters. deliveries were completed, and the spacecraft is now under environmental testing. **Exploration:** The first UK led experiment was launched to the International Space Station (ISS) using worms as an analogy for human muscle and aims to discover more about muscle loss in space. The short period seismometer was launched on the NASA Insight mission on 5 May 2018 and has been safely deployed on the surface of Mars. In the summer, the competition to name the ExoMars rover, received over 36,000 entries with the winning name 'Rosalind Franklin'. The UK contribution to the Raman Spectrometer has been delivered and the UK led Panoramic Camera is undergoing its final tests before being delivered to Airbus Stevenage. **SABRE:** The ESA Preliminary Design Review was passed at the end of 2018 and the test facility in the US was commissioned to carry out hot testing of the heat exchanger. NovaSAR: Launched in September 2018 and the first sample imagery released in late 2018. NovaSAR-1 will be fully operational in spring 2019. **IPP:** Call 1 and 2 projects are all underway with emphasis now on the impacts from investment using mid-line and end-line evaluations. IPP also released its Space Solutions for Development Catalogue showcasing the range of UK's expertise in satellite technology, and how it can help tackle problems such as illegal deforestation, disaster response and food production. In addition, three sector reports have been published outlining why and how the space data services industry has a critical role to play in addressing major challenges within disaster resilience, agriculture and forestry in emerging and developing economies.

KPI Status Summary

International Engagement

We will strengthen existing international partnerships and create new relationships with nations strategically aligned to government priorities, based on our mutual interests in science and technology, security and economic growth.

Success Measures

Ensure that the Government has an informed policy position and well-coordinated approach to deliver the best outcomes for the space sector following the UK's Exit from the European Union to include options for Earth Observation, satellite navigation and space surveillance and tracking.

Conduct a full economic analysis across all our European Space Agency investments to underpin the planning of the 2019 European Space Agency Ministerial Council (CMIN19) meeting. Produce an Export strategy, with government partners and industry that will focus on high value exports into key global space markets by end of quarter 4.

EU Exit: Preparing the Agency and the space sector for EU Exit has been challenging, requiring a united response across the Agency to prepare for negotiations, and appropriate contingency plans in the event that the UK leaves the EU without a deal. In line with other departments, we have prepared the Agency

for all potential outcomes and we will continue

to provide support to the sector through the

uncertainty that lies ahead.

CMIN19: Major research reports included evaluations of telecommunications research (Artes), the Earth Observation Programme, the exploration programme (Aurora), the space science programme and on drivers for UK inward investment (including the impact of our ESA membership on FDI). It is early days but all studies are indicating strong economic returns of up to £10 for every £1 invested.

Export Strategy: As part of our cross Whitehall engagement, the International Policy team has sought to develop a stronger relationship with the Department for International Trade and the Foreign and Commonwealth Office (FCO). We are now supporting the Department for International Trade's (DIT) High Value Space campaigns - enabling industry to realise key export goals, briefing Ministers on the space sector and commercial prospects, jointly promoting the space sector and its commercial prospects to HM Trade Commissioners and jointly supporting inward visits focused on investment opportunities. Through our engagement with the global Science and Innovation Network we have sought to deepen existing relationship and establish new opportunities for Agency to Agency collaborative programmes that showcase the UK Space sector.

2018-19 PERFORMANCE IN DETAIL

Outer Space Act Licensing

The Agency currently grants licences under the Outer Space Act 1986 to launch or operate a space object. In 2018-19, the Agency issued 25 Outer Space Act licences, the largest number of any year to date, reflecting a growth in number of new space actors the industry. This includes major activity around novel constellation licensing.

This year we have introduced new measures to ensure that our licensing system adapts to innovations in a way that is proportionate and responsive. We have successfully introduced a new 'sliding scale' policy for third-party liability insurance requirements. For missions such as a low-risk satellite deployed from or operating below the International Space Station, the requirements for this insurance may be reduced or waived. On the other hand, operators planning higher-risk missions will need to hold a greater level of insurance than that required for standard missions. This new approach should also make it easier for operators to procure insurance for large constellations. We also introduced a trafficlight licensing system; a new pre-application process to give prospective applicants an early indication of how likely it is that their mission would be granted a licence, and which can result in a streamlined application process.

Space Exploration

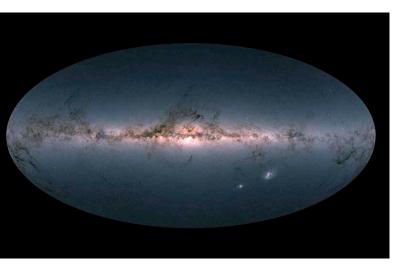
This has been an extremely busy year for the Space Exploration programme. A short period seismometer built by Imperial College and the University of Oxford was launched on the NASA Insight mission on 5 May 2018 and safely landed on Mars on 26 November. The instrument has now been safely deployed on the surface of Mars. The data will be used to understand the structure of the interior of Mars.

The UK contribution to the Raman Spectrometer has been delivered and the UK led Panoramic Camera was built and at the end of the year was undergoing its final tests before being delivered to Airbus Stevenage for integration on Rosalind Franklin.

Space Science

Our investment in space science programmes have continued to support world-class science in the UK, keeping the UK at the forefront of discovery and also providing economic benefits in stimulating technological innovation that supports industrial growth. We do so by working at both national and international level (through the European Space Agency - ESA). This included participation in a range of missions, designing and building space and planetary science instruments and supporting the operational phase of missions, as well as post-operational data calibration, validation and archiving.

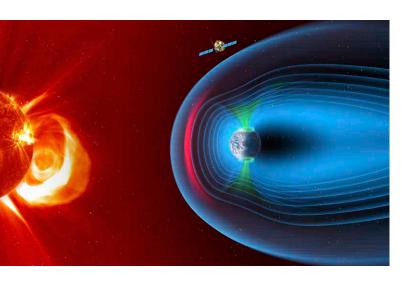
Mission highlights



The Gaia astrometry mission has continued to operate towards its goal of making the largest, most precise 3-dimensional map of our galaxy. The UK Space Agency support for data analysis as part of a European-wide consortium resulted in a major data release in April 2018 which has revolutionised many aspects of astronomy. This included an extraordinarily precise three-dimensional map of more than a thousand million stars throughout our Galaxy and beyond, mapping their motions, luminosity, temperature and composition. This huge stellar census has provided data to tackle an enormous range of important problems related to the origin, structure and evolutionary history of our Galaxy.



In October 2018, BepiColombo was launched on its 7-year journey to Mercury. The Agency has been supporting the design and development of this mission since 2006. The UK has major roles in technology such as the ion thrusters which are now propelling the spacecraft so that it will not be pulled into the sun, as well as building key experiments onboard the spacecraft that will analyse the chemical composition of Mercury's surface.



The Agency is funding key instrumentation on-board SMILE (Solar wind Magnetosphere Ionosphere Link Explorer). This is a collaboration between the ESA and Chinese Academy of Sciences. It will study how the solar wind interacts with the Earth's magnetosphere, which can impact on satellites, power grids and communications networks integral to our modern lives. This mission was approved in 2019 and is now entering Phase B.

ARIEL (Atmospheric Remote-sensing Infrared Exoplanet Large-survey) is a new ESA mission which will examine the atmospheres of 1,000 exoplanets in order to understand key processes which form planetary systems and how they evolve. The Agency is funding UK scientists and engineers to lead the European academic consortium tasked with building the payload, which will be assembled and tested in Harwell, Oxfordshire.

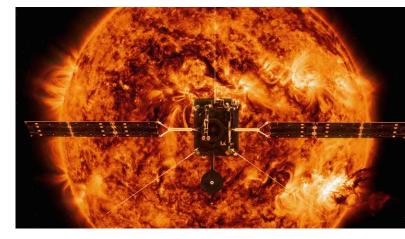


Other missions in development

JUICE (Jupiter Icy moons Explorer) is ESA's mission to study Jupiter and three of its moons, Ganymede, Europa and Calisto, all of which are believed to have liquid water beneath the surface, with the potential to support life. JUICE is due to launch in 2022, reaching Jupiter in 2029. By 2023 it should enter orbit around Ganymede, becoming the first spacecraft to orbit a moon other than our own. The Agency is funding the development of the magnetometer for the science instrument suite and is also contributing to two other instruments on board.



UK Space Agency support has enabled the UK to hold key roles on ESA's Solar Orbiter mission. The mission will study the Suns and how it creates and controls the charged particles blow out into the interstellar medium. The UK Space Agency is funding lead roles on two instrument suites, the Solar Wind Analyser and the Magnetometer, which will directly experience the in situ nature of the solar wind, and involvement in a spectroscopic and an ultraviolet imager which will study the origins of the particles on the Sun's surface. The spacecraft has been designed and tested to operate in the Sun's challenging environment by UK industry and will be launched in 2020.

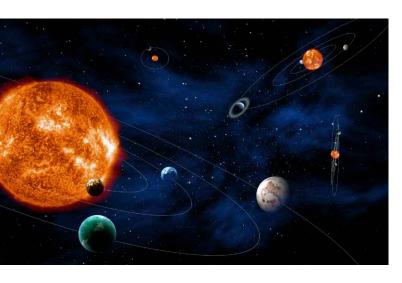




EUCLID is ESA's mission to study Dark Energy and Dark Matter. Researchers now believe that around 85% of the Universe consists of Dark Matter, a mysterious substance which may be made up of as yet undiscovered particles, yet we still know very little about it. Euclid will launch in 2022 and will use two instruments to map the geometry of this 'Dark Universe' using visible and infra-red light. The Agency is funding the development of one of these instruments, the visible camera (VIS) and a data processing centre on the ground to analyse the large amounts of data that will be returned. The Charge-Coupled Device (CCD) detectors for VIS are being manufactured by UK industry under contract to ESA.



MIRI: The UK is leading the European Consortium to build the Mid InfraRed Instrument (MIRI) for NASA's James Webb Space Telescope, due to launch in 2021 as the successor to the Hubble Telescope. MIRI was delivered to NASA in 2012 and the team is now supporting the extensive programme of calibration and testing in the USA, to fine tune the instrument performance and ensure that it will withstand the shock of launch and the harsh environment of space.



PLATO (PLAnetary Transits and Oscillations of stars) is ESA's mission to find and study Earth-like planets orbiting other stars in the 'habitable zone' – the distance from the star at which liquid water could exist on the surface, potentially supporting life. The Agency is supporting the science leadership for PLATO, along with the development of the electronics for the cameras, and a data processing centre to optimise the science return to the UK. UK industry is manufacturing the specially designed CCD (Charge Coupled Device) detectors for the cameras under contract to ESA. UK industry will also build the avionics and integrate the service module for the spacecraft. PLATO is expected to launch in 2026.

Credits from top: ESA, NASA/Chris Gunn, ESA/C

ESA's LISA (Laser Interferometer Space Antenna) mission will be the first space-based gravitational wave observatory, due for launch in 2034. Gravitational waves are tiny ripples in space-time caused by massive events like the collision of black holes. They offer a powerful new tool to study the Universe, using gravity instead of light to explore black holes, the Big Bang and even structures in space we have yet to discover. The Agency is funding a specialist UK team to design LISA's optical benches, core elements of the exquisitely precise measuring system needed to detect these waves as they travel through space.



The ESA ATHENA mission will study high energy astrophysics events by combining an X-ray telescope with state-of-the-art scientific instruments. The Agency is funding UK teams to provide expertise for the Wide Field Imager instrument on both the hardware development side and the data processing. This ambitious mission will be launched in 2031 and will look for supermassive black holes and study how they evolve.



Space Innovation _

The NovaSAR-1 technology demonstration mission was part-funded by the Agency and the satellite built in the UK. NovaSAR-1 will provide low cost S-Band Synthetic Aperture Radar (SAR) images and because it is a radar sensor, NovaSAR-1 can acquire imagery during the day and the night, irrespective of weather conditions. NovaSAR-1 was launched in September 2018 followed by system testing. The first sample imagery was released in late 2018, and NovaSAR-1 is due to become operational from Spring 2019.



Credits from top: AEI/MM/exozet GW sim: NASA/C. Henze, NASA/JPL-Caltech,

Space Surveillance and Tracking (SST)

The Agency, working with the MoD/RAF who operate the UK Space Operations Centre at High Wycombe, have been a founder member of the EU SST Consortium since its inception in 2015. In that time, we have participated in the delivery of collision avoidance and fragmentation services. Since July 2018 we have provided the European Union, Member States and commercial organisations with orbital re-entry services. This has facilitated the consolidation of the UKs national SST effort into a more effective arrangement.

The current capability has been delivered through close partnerships with UK radar, telescope and laser range finder operators in the public and particularly private sector companies, small and medium-sized enterprises (SMEs). We also maintain close links with the USA by enhancing our existing international partnership through the Global Sentinel SST exercise where we are the only non-US nation to help organise and participate through both the civil space organisation and military partners.

Following the UK's decision to leave the European Union, the Agency has established the Space Safety and Sustainability Programme (S3P) to maintain and expand the UK's nascent Space Surveillance and Tracking capability. Following the planned Implementation Period, this will enable Government to continue to mitigate liabilities held by HMG under UN treaties, support growth through launch, licensing and innovation in the sector, and protect critical national infrastructure sectors from in-orbit threats. This programme will also maintain, embed and grow the UK's influence in the space domain where SST supports military and civil collaboration with Five Eyes Military/Intelligence allies and new partners.

Collectively, this activity supports the UK's ambition to increase its share of the global economy to 10% by 2030 through ensuring a proportionate risk-balanced approach in support of our new space regulatory activities.

Finally, in recent months we have agreed with the RAF to utilise data obtained from the RAF Fylindales radar for SST purposes which will significantly enhance UK civil capabilities in this area.

Telecommunications

The Agency has supported space enabled telecommunications for the future through ESA's ARTES (Advanced Research in Telecommunications Systems) programme which continues to be a draw for inward investment. We have invested over €100m over 30 projects, supporting the

development of satcom technology, products and services.

We are working with ESA, Mobile Network Operators and other parts of Government to support seamless communication and for 5G. The UK is instrumental in ESA's 5G activities, chairing the working group and having representation on a number of workstreams.

Technology

The Agency has supported and enabled many technology developments across the space sector working with industry, academia, other government departments and institutions in all areas (including some important telecommunications aspects too). The increased technology resource has enabled much of our success this year and increased the influence the UK has been able to exert.

This included a wider open General Support for Technology Programme (GSTP) call pilot that has seen many new proposals embarked upon that complement the many on-going and innovative new GSTP projects. We have seen an increase in the number of new component manufacturers, companies and technology benefitting new space markets across ESA and EC programmes through endeavours such as Harmonisation and European Space Components Coordination. We are steering space standards towards the low-cost access to space market, one of recognisable strength for the UK. The technology team also hosted a number of firsts in the UK such as the international electric propulsion conference at Queen Mary University of London (QMUL) and the international standards technical authority at Harwell.

Satellite Applications

SatelLife, the Agency's applications competition for 11-22 year-olds to encourage young people to better understand satellite data, ran for its third year. This received significant media coverage, as did the 'Dragon's Den' for the nine winners from the 2017-18 competition.



Their ideas included a 'Surf Safe' band to keep swimmers and surfers (especially children) safe at sea, a light pollution monitor to look at the level of traditional v LED lightbulb use and a town planning tool.

Business Applications, our ESA Programme, has continued to evolve to become more business-friendly, and easy to access. We have implemented a team of five Regional Ambassadors, and a bid writer, to support the work led by Ian Downey, the lead Ambassador for the UK, and to make businesses who are not 'space' businesses know about the opportunities space can offer, and the support ESA can give.

Through this Business Applications programme, in the last 12 months we have continued to support the Kickstarter Programme (small, 80k projects, funded at 75%) and the open call which allows companies to present any idea, at any time. More than 25 companies have led successful applications to this fund, and these have ranged from making mining safer; commercialising space science; protecting and enhancing potato crops and improving patient care.

We have also led a very successful event to bring together the Satellite Applications community in the UK, including showcasing the activities of the Space for Smarter Government Programme and the International Partnership Programme. This event brought together around 500 people and is the biggest applications specific event to have been held in the UK.

Space for Smarter Government Programme (SSGP)

A competition was held for feasibility and demonstrator ideas that could support the public sector. Eight projects, with a total value or around £700k, were selected including looking at ideas, the analysis of electric vehicle charging points in Bournemouth, analysing litter off the coast of Cornwall and monitoring our Critical National Infrastructure assets

SSGP has also bought a substantial quantity of archive commercial high resolution optical and Synthetic Aperture Radar (SAR) earth observation (EO) data over the UK. It is now available, free at the point of use, for R&D purposes to meet UK public sector challenges. Buying this data is not the endgame though – this is just an enabler to try and stimulate a whole new applications market within the UK Public Sector enabled by high resolution EO data.

The free SSGP Course - Introduction to Satellite Applications for the Public Sector - continues to grow both in reputation and reach; more than 150 people have now had their awareness of satellite applications increased.



Local Growth

The Agency continues to strengthen and expand the support on offer as part of its ambitious and UK-wide local growth programme. We have continued to co-invest in the Satellite Applications Catapult's five Regional Centres of Excellence and strengthened our network of 16 Business Incubators and Accelerators; helping new businesses to start, grow and access expertise and investment across the UK. We have worked proactively with Local Enterprise Partnerships and the Devolved Administrations and have funded locally led projects to align national space strategies with local plans and identify opportunities for growth and collaboration. We have also expanded our Harwell Campus office and are working closely with the Harwell space cluster to ensure its continued success as a gateway to a growing, diverse and truly UK-wide space economy as evidenced in the Industry Size and Health Survey 2018.

Earth Observation (EO) and Climate

During 2018-19 the Agency has supported continued growth in both the upstream and downstream EO sector and seen the UK EO community win important contracts throughout the EO supply chain; EO contribution to UK space income grew at a rate of 25% per annum since 2014-15 and now EO satellite services support an estimated £92bn of GDP (according to the Size and Health survey).1

We have leveraged strategic investments in ESA and supported continued UK engagement with the space component of the EU Copernicus programme whilst the UK's exit from the EU is negotiated. UK instruments and components have been launched on three ESA missions: the Copernicus satellite Sentinel-3B (in April), the Aeolus Earth Explorer (in August) and the third MetOp satellite as part of the EUMETSAT Polar System (in November).

We have expanded our work to broaden understanding of the importance of Earth Observation and inspire a new generation to work in the growing sector. Working with education colleagues, RAL Space and Business we held the first EO specific careers day where over ninety 12-14-year olds learnt about the diversity of roles within the sector. An exciting project by world leading scientists from the National Centre for Earth Observation (NCEO) (University of Edinburgh) and Plymouth Marine Laboratory is developing innovative lesson plans and interactive learning platforms (accessible via Raspberry Pi units) to allow schools to learn about and use EO to explore the science of the atmosphere and oceans. We sponsored MSc and

PhD student awards presented at the UK National Earth Observation Conference and supported the Agency's Space Placements in Industry (SPIN) programme with five students placed within EO sector roles.

International Partnership Programme

International Partnership Programme (IPP) is the Agency's Sustainable Development Programme. Working with £152m from the Global Challenges Research Fund, this ODA-focused IPP initiative remains the largest programme of its kind in the world. We provide supporting grants to industry, academia and non-profit organisations to deliver space-enabled solutions that bring a sustainable economic or societal benefit to emerging and developing economies around the world. Significant matched funding from stakeholders further enhances the value and the effectiveness of these projects.

Today we are supporting 33 of these projects throughout the world, delivered through partnerships with 112 international organisations that include government ministries, industry, non-government organisations (NGOs) and academia.



European Space Agency (ESA)

The programme of work for 18-19 was in three broad areas:

- To build the evidence base for our membership of ESA ahead of Council of Ministers 2019 (CMIN 19) also called Space 19+.
- To communicate the benefits of that ESA membership.
- To handle and negotiate significant policy hurdles with ESA and its member states.

This has been a year of considerable successes from our ESA membership underpinned by vibrant communication and evidence strategies. This has shown that ESA membership provides major benefits and considerable stability for much of the space sector at a time of considerable change:

- 1. GAIA is mapping 10 billion stars and the data is producing one of the most prolific streams of refereed publications in space science.
- 2. The Minister visited the European Centre for Space Applications and Telecommunications (ECSAT), Harwell, to talk to companies that have benefitted from ESA investment through the telecommunications research (ARTES) programme. Major new missions included Aeolus "the wind catcher" that was built by the UK and launched in August to measure wind speed and is already improving the accuracy of global weather forecasting.
- BepiColombo, a joint ESA/Japanese Aerospace Exploration Agency (JAXA) mission, began its seven-year journey to study the planet Mercury in October 2018.
- 4. Early contracts were signed with ESA positioning the UK to win future ESA work in returning samples from Mars and for new a mission to study space weather which is in partnership with US/ The National Oceanographic and Atmospheric Administration (NOAA).
- 5. In November, French company Eutelsat signed multi-million-pound trade contracts for telecommunication satellites with Airbus and Thales Alenia Space which was a direct result of research collaboration through the ESA telecommunications programme.

This has been a year of considerable challenges alongside the tremendous opportunities. Early part of the year was dominated by EU exit policy issues as they impact on ESA. Action and successes include:

 Ensuring the outputs for the ESA Intermediate Ministerial Meeting in Madrid in October 2018

- stressed ESA independence from the EU plus their autonomy and global reach.
- Feeding into negotiations on the EU multi-annual financial framework for space to ensure non-EU members of ESA are not disadvantaged by how ESA is treated in the regulations.

International Policy

The CEO of the Agency led a the Agency delegation to the International Astronautical Congress (IAC) in Bremen. Working with the British Interplanetary Society we spearheaded a UK pavilion hosting a number of UK space sector companies. We met with the leading and emerging space agencies, several key industry partners and hosted Japanese Government and industry Working Groups. Against the backdrop of the IAC, the CEO of the Agency and the Head of the newly created Australian Space Agency signed a Memorandum of Understanding (MoU). The MoU seeks to provide a framework for collaborative activities and the exchange of information, technology and personnel between both nations.

www.gov.uk/government/news/britain-and-australia-enter-into-space-agreement

As part of this engagement the Agency provided a lead role at the 13th UK China Space Conference which was jointly developed by Science & Technology Facilities Council (STFC) RAL Space and Beihang University. At his keynote address, the China National Space Administration's Vice President expressed the hope that China/UK Space collaboration could be elevated to a more strategic footing, with a 5-10 year roadmap to deliver collaboration.

UK Global Navigation Satellite System (GNSS)

The UK Global Navigation Satellite System programme was established to examine options for the delivery of assured Position Navigation and Timing (PNT) services. In November 2018, the Prime Minister confirmed that the UK would not be using the EU Galileo system for National Security purposes including Defence.

In July 2018, an Outline Business Case was approved providing funding of £92m for the programme Engineering Design and Development Phase (EDDP) which is a study phase to determine system requirements and an estimation of the cost and schedule for the design, building and operation of a UK GNSS system. Following the EDDP a decision whether to proceed with a UK GNSS system will be made.

Work is underway to define how we will deliver the following benefits:

- Capability: A new, UK controlled space capability that will strengthen national resilience and provide secure assured PNT anywhere in the world.
- Global Standing: Demonstrate the UK's role as a major global actor, partner in space capabilities and provider of PNT services.
- Prosperity: Boost UK prosperity by providing new high-tech opportunities in the space sector and stimulating innovation in sectors that utilise position, navigation and timing services
- Establishment of Agency programme in partnership with Ministry of Defence: The Prime Minister announced the establishment of an Agency programme, with full support of the Ministry of Defence, to develop the options.
- Industry Engagement: The programme has engaged extensively with UK industry and a number of contracts are now in place or in the process of being let.

Critical National Infrastructure (CNI)

The Agency has taken forward its role as lead government department responsible for assuring the resilience of the UK space sector to disruptive challenge.

We have refined our understanding of the cross-sector dependencies on space services through our Space Discovery day workshop, working with representatives of the CNI sectors, industry and academia, creating the top-level overview shown below. We have conducted follow up sessions with some sectors to broaden the coverage of the analysis. We have also issued a contract to undertake the next level of cross-sector dependency analysis to identify services and their providers.

We continue to build our relationships with key expert groups from industry, government and internationally. This includes setting out the criticality thresholds for the sector, agreeing our cyber, physical and personnel threat assessment methodologies and defining the process for declaring the CNI status of a space asset with the National Cyber Security Centre (NCSC) and the Centre for the Protection of National Infrastructure (CPNI). We have also negotiated support from NCSC and CPNI in undertaking assessment activities and reformed our industry liaison group into a model which will better support our objectives.

We have continued our involvement on cross-Government risk reduction and response and recovery forums, such as power resilience, telecoms networks, Secure by Design and the PNT Technical Working Group.

Education

The Agency hosted and led three days of education and outreach activities on the Agency stand at the Farnborough International Air Show. During Futures Day a number of role models from across the sector, who are featured in the Agency-supported, Women into Science and Engineering (WISE) campaign's 'People Like Me' space careers resource met and talked to visitors about their jobs and career journey. This project has developed further through the year, migrating to the online 'My Skills My Life' resource, including increasing numbers of female, early career professionals from the space sector and encouraging a more diverse range of role models to step forward. We have continued our support for the Space Education Office (ESERO-UK) which registered over 76,000 views and downloads of space-related teaching resources during 2018 and delivered Continuing Professional Development (CPD) training to over 1,200 teachers; and the National Space Academy which delivered training to 934 teachers, masterclasses to over 11,000 students and careers events to 1,800 students and adults. Our target to reach 140,000 people through our delivery partners and Outreach events has been met, and 43 applications for 'Space for all' grants were received.

To raise the profile of careers in the space sector and help improve the provision of skilled workers, we have continued to run the SPIN scheme to give university students experience of working in the sector over a period of two months (32 students in Summer 2018) and extended it to graduates and PhD students outside the Summer period (23). In parallel we have been supporting a Space Engineering Trailblazer Group developing the standards for apprenticeships at Level 4 and Level 6. Scholarships to attend the International Space University's Space Studies Programme were awarded to six students in 2018.

Graham Turnock

Chief Executive and Accounting Officer 25 June 2019

OUR PLANS FOR THE FUTURE

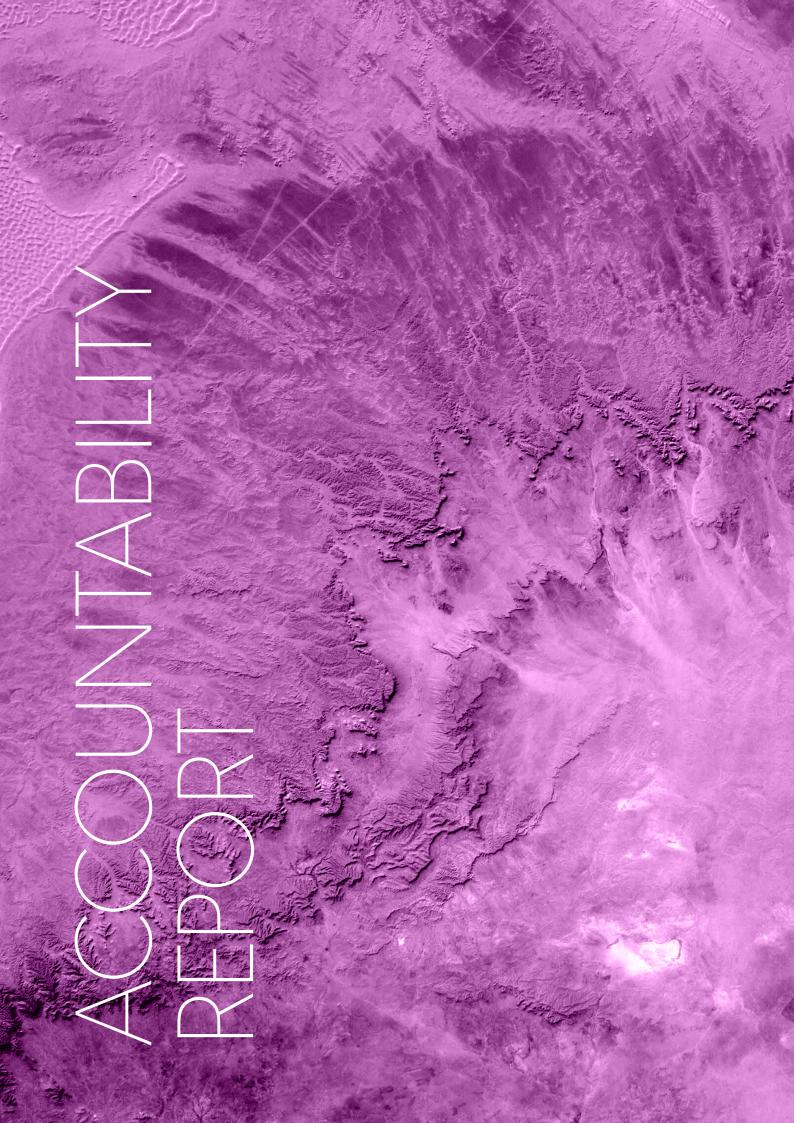
The Agency Corporate Plan for 2019-20 highlights our ambition to support the UK to be a leader of the new space age.

Due to rapid recent technological innovation, space offers a large and growing range of opportunities to support economic activity, deliver public services and protect the environment. Space technologies have become deeply embedded in, and critical to, almost every aspect of our daily lives. As a world leader in key space domains, we are well placed to take advantage of exceptional opportunities to enhance the UK's prosperity and knowledge, security and defence, and global influence.

To achieve this we aim to maximise uptake of space technology and services for science, security, the economy and public services with an overall ambition of capturing 10% share of the world market by 2030. The global space sector is at an inflection point; there is a revolution in technology, both in

space and through the exploitation of the enormous potential to generate data about the earth from space through artificial intelligence with new business models delivered by commercial investment. The Agency needs to be responsive to changes and highlight areas where the UK is already strong such as data driven applications and space robotics and can be a world leader.

Artist's impression of James Webb Space Telescope. Credit: ESA.





DIRECTOR'S REPORT

We have an effective corporate governance framework in place to ensure that we continue to deliver against our purpose and vision.

In last year's Director's Report, I highlighted internal control improvements planned for 2018-19. I am pleased to report that the Agency has made satisfactory progress in meeting these goals.

Complete the implementation of a more comprehensive scheme of delegations, recognising the need to balance accountability and responsibility in line with the Agency's operating model.

In 2018-19, the Agency has updated the scheme of delegations and introduced a new form of delegation for certification of invoices allowing budget holders to sub delegate responsibilities at appropriate levels. The adherence to the new scheme of delegations is monitored internally. In addition, the Agency has also received a positive feedback on the implementation and monitoring of the new scheme as part of the internal audit follow up review conducted in 2018-19.

Continue to develop the DAASIC review of progress against all internal control assurance statements on an ongoing basis; and conduct a formal mid-year review.

A formal mid-year review was conducted in October 2018 which did not identify any material weaknesses in internal controls. Directors' assessment was again obtained at the end of the year as part of the final DAASIC exercise which provided an overall rating of 'substantial assurance.' Further details can be found below.

Implement the action plan addressing recommendations made by GIAA as part of a recent HR audit to strengthen internal processes for staff induction, flexible working and absence management.

The HR team reviewed and updated the Agency flexitime policy and procedures. The team also developed a new flexi agreement for all staff

wishing to participate, these agreements detailed individual and line management responsibilities and limitations associated with this working pattern. HR drop in surgeries were held in London and Swindon for staff to attend with any queries, along with regular HR updates communicated Agency wide. New assurance processes are in place to monitor compliance.

Increase HR engagement across the Agency by fostering a closer integration with the People Groups.

In response to People Survey feedback for a stronger central support, HR have developed a People Plan which will build on the existing work of the People Group and Directorate Plans and is a collaboration between HR, the Executive Board and staff. The Agency has dedicated workstream leads who will work alongside staff to support the delivery of the desired outcomes.

Increase awareness of the whistleblowing and raising concern arrangements to ensure the policy is used effectively.

A non-executive member of our Steering Board acts as the point of contact for those that wish to raise concerns over whistleblowing. She was invited to attend an Agency Away Day in July 2018 and delivered a keynote address that included a reference to her whistleblowing role. No reports of whistleblowing were received in 2018-19.

Our Leadership

The Agency Steering Board has continued to provide strategic leadership for the Agency in delivering its objectives through scrutiny, advice and challenge. The Board's non-executive members bring a wide range of experience, covering industry, academia, legal, and finance. David Southwood's appointment ended on 31 March 2019 and a new Chair, Dr Sally Howes, OBE was appointed from 1 April 2019.

Non-Executive Members



Prof. David SouthwoodChair of the Steering
Board

Appointed as Chair in June 2016.

David holds the post of Senior Research Investigator at Imperial College London where his research interests include solar-terrestrial physics and planetary science. David is a former President of the Royal Astronomical Society and he was Director of Science and Robotic Exploration at the European Space Agency until 2011.



Clive Tucker
Member of the
Steering Board and
Chair of the Audit
Committee

Appointed in December 2014.

Clive is a solicitor and until 2010 was a corporate partner of international law firm Ashurst LLP where among other transactions he advised on satellite procurement, acquisitions, financing and regulatory matters. He is a non-executive member of the National Committee of the Forestry Commission England, and an independent member of the UK and Ireland Regulatory Board ofthe Royal Institution of Chartered Surveyors.



Dr Dame Frances
Saunders, DBE, CB
Member of the
Steering Board and
Audit Committee
and Agency's
independent
nominated
whistleblowing officer

Appointed in December 2014.

Following a variety of research and science and technology management roles within government, Frances' Civil Service career culminated with her appointment as Chief Executive of the Defence Science and Technology Laboratory (DSTL) from 2006-2012. In June 2018. Frances was named a Dame Commander of the Order of the British Empire (DBE) for "services to Science and Engineering," announced as part of the 2018 Queen's Birthday Honours List.



Prof. Malcolm McDonald Member of the Steering Board

Appointed in July 2017.

A professional space technology engineer, academic & director, Malcolm is Professor and Chair of Space Technology at the University of Strathclyde, and Director of the Scottish Centre of Excellence in Satellite Applications (SoXSA). He is an acknowledged expert in space research who has worked in industry, academia, and government, is a Fellow of the Royal Aeronautical Society, and an Associate Fellow of the American Institute of Aeronautics and Astronautics.

Executive Team

Our Executive team provides day-to-day leadership and management. It ensures that we operate efficiently and effectively, regularly reviewing performance and managing risks, and monitoring business delivery and financial performance.

Non-Executive Member



Keira Shepperson

Keira joined the Agency Audit Committee as an independent, nonexecutive member in May 2018

She is currently Chief of Staff to the CFO at the British Business Bank, which is a government-owned business development bank dedicated to making finance markets work better for smaller businesses.



Dr Graham TurnockChief Executive

Graham has been CEO since April 2017.

Prior to this he led the Better Regulation Executive, a unit within BEIS. Graham has extensive experience across Whitehall and at a European level having worked in the European Commission and having held several other posts in the UK Civil Service with a strong European element, including the Treasury's lead on the EU budget.



Dr Alice BunnDirector of
International (Job Share)

Alice is International Director at the Agency, responsible for international engagement through multilateral and bilateral frameworks, capturing the wider societal benefits of space programmes and harnessing the inspirational effect of space for skills and education. She also leads security and resilience of the UK's infrastructure and space applications. Alice of the European Space Agency.



Peter Finn
Chief Operating and
Finance Officer and
Security, Information
and Risk Officer
(SIRO)

Joined the Agency in February 2014.

Peter is responsible for the UK Space Agency's operational performance, financial management and risk and assurance. He was responsible for HR until February 2019 when the new Organisational Development Directorate was formed.



Dr Nicola HigginsDirector of
Regulation

Joined the Agency in January 2018.

She has held a wide range of roles in the Civil Service, at the Ministry of Defence, Department of Energy and Climate Change, Department for Communities and Local Government and The Pensions Regulator. Nicola joined the UK Space Agency from her position as Head of Strategy and Policy at the Oil and Gas Authority.



Catherine
Mealing-Jones
Director of Growth

Joined the Agency in January 2012.

Catherine is responsible for the UK Space Agency strategy to continue to grow and develop the UK space sector. She represents the UK Space Agency on the Space Growth Partnership Board.



Dr Chris CastelliDirector of
Programmes

Joined the Agency in November 2011, and was appointed as Director of Programmes from November 2014.

Chris leads the Agency's involvement with ESA on space science, technology and exploratory missions and manages the Agency's national programmes.



Martin Petto
Director of
Organisational
Development

Joined the Agency in April 2017 and was appointed Director of Organisational Development in February 2019.

Martin leads on human resources and organisational development and design.



Claire Barcham
Director of
Commercial Space

Joined the Agency in September 2016 as Satellite Launch Programme Director following positions in the Department of Health, Home Office and HM Revenue and Customs. Claire has been New Commercial Space Director since April 2018.



Rebecca Evernden
Director of
International (Job
Share)

Joined the Agency in June 2016.

Rebecca leads on EU exit issues; the education and skills programme and she is the SRO for the UK GNSS Programme.
Rebecca is a trustee at the National Space Centre, Leicester.

STATEMENT OF ACCOUNTING OFFICER'S RESPONSIBILITIES

Under the Government Resources and Accounts Act 2000, the Secretary of State with the consent of HM Treasury has directed the Agency to prepare for each financial year a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the UK Space Agency and of its income and expenditure, Statement of Financial Position and cash flows for the financial year.

In preparing the accounts, the Accounting Officer is required to comply with the requirements of the Government Financial Reporting Manual and, in particular, to:

- observe the Accounts Direction issued by the HM Treasury, 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 goingconcern basis; and
- confirm that the Annual Report and Accounts as a whole are fair, balanced and understandable and take personal responsibility for the Annual Report and Accounts and the judgements required for determining that it is fair, balanced and understandable

BEIS has appointed the Chief Executive as Accounting Officer of the Agency. 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 safeguarding the Agency's assets, are set out in Managing Public Money published by the 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 the Agency'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.

GOVERNANCE STATEMENT

As Chief Executive and Accounting Officer, I am required to produce an annual governance statement. I have signed this statement after satisfying myself that there are no material ongoing governance issues affecting the Agency that I should declare within this statement.

Corporate Governance

This governance statement sets out the governance, risk management and internal control arrangements for the Agency. It applies to the financial year 1 April 2018 to 31 March 2019 and up to the date of approval of the Annual Report and Accounts. I am supported in my role as Accounting Officer by a governance framework which includes the Agency's Boards, Committees and Senior Management. In forming my assessment, I have examined:

- board and committee effectiveness in managing risks, finance and operational performance
- the policies in place impacting on risks such as counter fraud, counter bribery, conflicts of interest and whistleblowing
- the work of internal audit, which awarded the Agency an overall annual moderate assurance
- the assessments of my individual directors in the Director's Annual Assurance Statements of Internal Control (DAASIC) providing an overall rating of a 'substantial' level of assurance
- the external audit Management Letters

Legal status

The Agency is an Executive Agency of the Department for Business, Energy and Industrial Strategy (BEIS) and does not have a separate legal status outside of BEIS. Therefore, in order to enter into contracts, delegated powers are conferred on the Agency by the Permanent Secretary. In the event of a contract being entered into, the UK Space Agency is a 'Contracting Authority' on behalf of the Secretary of State for BEIS, which is the 'Authority'.

Governance structure

The UK Space Agency is accountable to Parliament for the funds it expends through our parent department, BEIS. Parliament monitors and influences the Agency through its Select Committees and the Parliamentary Ombudsman.

The Agency's working relationship and lines of accountability with BEIS are defined in the Agency's Framework Document (revised and approved by Ministers in summer 2016), Corporate Plan, Allocation Letter(s) and Letter(s) of Delegated Authority made to the Chief Executive. These documents are subject to periodic review. The Agency is also held to account through regular performance reviews with our BEIS sponsor team. These help ensure active engagement and a transparent relationship with our parent department.

Steering Board

The role of the Agency Steering Board is to advise the Secretary of State and Ministers on the strategic direction of the Agency, through the Director General of Business and Science at BEIS. The Steering Board monitors performance against targets, and risks, within the strategic objectives set out in the Agency's Corporate Plan.

The Steering Board provides guidance to the Chief Executive and their senior executive team on the operation and development of the Agency. The Board are expected to fulfil this aspect using the benefit of their collective experience through advice and constructive challenge.

All Board meetings remained quorate throughout the year i.e. three or more of the members were in attendance including the Chairperson, or his/her representative, a Non-Executive Member, a representative from the Department and the Chief Executive or, in their absence, an authorised deputy.

Audit Committee

The Audit Committee is a sub-committee of the Steering Board and provides guidance and assurance to the Chief Executive to assist in fulfilling their Accounting Officer responsibilities. The Chair of the Audit Committee reports to the Steering Board Chair.

The committee consists of three NEMs including one BEIS appointee, the Chief Executive and the Agency's SIRO. The meetings are also attended by the representatives from the Government's Internal Audit Agency (GIAA), NAO and the Agency's Executive Board members as required.

The Audit Committee generally meets on a quarterly basis but can meet more frequently to deal with exceptional matters. Six meetings were held during 2018-19, two of which were ad-hoc meetings. All Committee meetings were quorate.

New Projects

The Agency sponsors two large projects, namely GNSS and Spaceflight which, in recognition of the higher scrutiny needed are subject to additional governance controls:

GNSS

The sponsoring function is enacted through the UK GNSS Sponsoring Group, chaired by the CEO of the Agency with Sponsorship provided by BEIS, MoD, Cabinet Office and FCO, who represent the distinct user groups setting requirements for the capabilities being delivered by the programme. The UK GNSS Sponsoring Group maintains strategic and investment oversight of the UK GNSS programme and is the senior decision-making point for decision escalated up from the Programme Board.

GNSS also has a Cross Whitehall Steering Group that ensures that participating Departments' interests in GNSS are agreed and strategically aligned with respect to the UK GNSS Programme and supports the Sponsoring Group to help define the higher-level strategic direction that the Programme will be supporting.

Financial approval of the UK GNSS Programme is through the Agency as an Executive Agency of BEIS, BEIS as owning Department throughout the Engineering, Development and Design Phase (EDDP) phase then HM Treasury in accordance with normal Managing Government Money and Green Book arrangements.

The Senior Responsible Owner (SRO) of the programme is the Director International, UK Space Agency, Rebecca Evernden, accountable to senior sponsors and ministers for all aspects of the programme including financial accountability. Within the UK GNSS Programme we have a range of Boards and Working Groups which support the Senior Responsible Owner and report to the UK GNSS Programme Board.

Spaceflight Programme

The UK Spaceflight Programme is a cross government programme sponsored by the UK Space Agency, the Department for Business, Energy and Industrial Strategy, the Department for Transport and the Civil Aviation Authority. Strategic oversight and direction of the programme is provided through the Spaceflight Programme Board, chaired by the CEO of the Agency with representation from sponsoring departments and organisations.

Wider cross-Whitehall engagement is ensured at working level and through membership of project boards - with Ministry of Defence, the Foreign and Commonwealth Office, the Health and Safety Executive and the Military Aviation Authority working to ensure alignment of activity across government. The Senior Responsible Owner (SRO) of the programme is the CEO of the Agency, Graham Turnock, accountable to senior sponsors and ministers for all aspects of the programme including financial accountability.

Within the UK Spaceflight Programme, we have a range of Project Boards and Working Groups which support the SRO and report to the Spaceflight Programme Board - including the Grant Oversight Advisory Board, which is chaired by Peter Truss (from the Science and Technology Facilities Council) and provides independent scrutiny of major grant recipients.

Board and Committee attendance 1 April 2018 to 31 March 2019

Board Member	Steering Board	Audit Committee
Graham Turnock	4 (4)	6 (6)
Peter Finn (SIRO)	4 (4)	5 (6)
David Southwood (NEM)	4 (4)	-
Frances Saunders (NEM)	4 (4)	5 (6)
Clive Tucker (NEM)	4 (4)	6 (6)
Malcolm Macdonald (NEM)	4 (4)	-
Paul Hadley (BEIS) ¹	2 (2)	-
Steph Hurst (BEIS) ²	1 (2)	-
Keira Shepperson (NEM)	-	6 (6)

Figures in brackets denote the total number of meetings that could have been attended by the individual based on when they commenced their role.

The members of the Steering Board and Audit Committee, their Terms of Reference and the summarised minutes of meeting discussions are available on the Agency website: www.gov.uk/government/organisations/uk-space-agency/about/our-governance

Executive Board

The Executive Board, chaired by the Chief Executive, manages the day-to-day operations and activity of the Agency, including the provision of policy advice to ministers. Since January 2019, the Board has convened twice monthly to make decisions and oversee high-level business planning, financial, risk and management issues. Prior to this, the Board met weekly. The Board receives advice and guidance from the Steering Board and Audit Committee. The Board is also responsible for overseeing standards, values and controls within the Agency. Minutes from the Executive Board are distributed to all staff and actions are monitored by the Agency Performance Team.

At the beginning of 2019 a new organisational development directorate was established to focus on people, capability and change within the Agency.

Space Sector Council

The Space Sector Council is the forum through which sector discusses strategic issues facing the sector and engages with Government. It is chaired by Andy Green, President of the UKspace Trade Association. Its membership comprises senior industrialists, academics and officials from the Agency, Department of International Trade and the Ministry of Defence.

The Council met four times in 2018-19, empowering the Chair of the Council to offer clear and strategic advice to ministers related to: Space industrial policy; the impact of National and local space initiatives; membership of the European Space Agency; and regulation.

The Council also provides the high-level governance for the sector's Space Growth Partnership, itself a cross-Sector team established to define and implement practical actions to grow sector revenues and innovation. The Council works through an SGP Board, which includes the Agency's Director of Growth, to provide the direction of travel, agree major deliverables and communicate the resultant partnership strategy and benefits to ministers. This has enabled the Council to provide a coordinated space sector contribution to the Government's Industrial Strategy.

¹ Paul Hadley's appointment ended in November 2018 and was he was replaced by Steph Hurst.

² Steph Hurst commenced her role on 17 September 2018. Karen Folkes from the BEIS Sponsor team substituted for her at the December Steering Board meeting.

CONTROL ACTIVITIES

Our control activities aim to ensure that the policies and procedures governing the organisation and our governance arrangements are efficient and effective.

Annual review of effectiveness of internal controls

As Accounting Officer, I have responsibility for maintaining a sound system of internal control that supports the achievement of the Agency's policies, aims and objectives, whilst safeguarding the public funds and departmental assets for which I am personally accountable. This is done in accordance with the responsibilities assigned to me in HM Treasury's 'Managing Public Money', and the requirements set out in my appointment as the Agency Accounting Officer, including the delegation of financial authority from BEIS. My review is informed by a range of key processes and documents including: Director's Annual Assurance Statements of Internal Control; the annual internal audit programme; the Agency's assurance framework and internal procedures; the Agency's risk appetite; and the external audit Management Letter.

Bought in services

The Agency recognises that some reliance is placed on third party service providers, either when such services are provided by other public-sector organisations as part of pan-government initiatives, or from private sector organisations where the relevant technical expertise is not available within the Agency or wider Government.

UK Shared Business Services (UKSBS) - To support our business delivery, the Agency uses BEIS's partner organisation, UKSBS, to provide strategic and operational procurement; and transactional services in finance, payroll and human resources. The assurance on the internal control for each of these services is provided by BEIS as part of the Department's Shared Services Programme. The Government Internal Audit Agency (GIAA) is UKSBS's internal auditor. GIAA's internal audit reports provide input to UKSBS Executive Director's Quarterly Management Assurance letters to Accounting Officers. At the end of 2018-19, the overall assurance for UKSBS customer facing operations was assessed as moderate. Further narrative is available in the

Governance Statement for UKSBS, which is published as part of its Annual Report and Accounts.

BEIS ICT services - The Agency uses BEIS's contracted provider for ICT. The assurance on the internal controls for these services is undertaken by BEIS

The Government Legal Department (GLD) -

The Agency makes use of the services of GLD for the provision of the majority of legal advice sought by the Agency. The assurance on the internal control for these services is undertaken by BEIS as part of the Departmental Service Level Agreement with GLD.

The Government Actuary's Department (GAD) -

The Agency uses the GAD for actuarial analysis to help inform policy development where appropriate.

Health & Safety Executive Laboratory (HSL) -

HSL is the Science Division of the Health and Safety Executive (HSE). The Agency uses HSL to undertake research and help shape development of regulations and guidance on safety management systems and risk analysis with respect to spaceflight activities in the UK. HSL's relationship with the rest of HSE gives them a unique insight into the regulation of safety-critical regulatory context of high-risk and hazardous industries such as spaceflight. HSL has a strong international reputation for high-quality, published research and worldwide collaboration on risk management. They are a designated World Health Organization collaborating Centre for Occupational Health and Safety Research.

Government Recruitment Service (GRS) - To support the Agency's resourcing needs, we use the Civil Service contracted provider in delivering the service associated around our recruitment and resourcing requirements. UKSA provide the information and GRS deliver the placing of job adverts on to CS Jobs Portal both for internal and external vacancies, together with information that supports the sifting and interview process and elements that support

the on-boarding. Assurance is maintained on the effectiveness of the service being provided through the SLA, Management Information and meetings with the GRS Account Manager.

Civil Service HR Casework - The Agency transferred its HR casework advisory service to a centralised team based in the Ministry of Justice from December 2018.

Other third-party service providers - The Agency seeks external technical expertise where appropriate. Due diligence and the risk management processes are carried out to assess competency of any such service providers.

Grant administration

Non-academic grant payments made via the National Programme are managed by the Agency through UKSBS. Academic grants are administered by UKRI on the Agency's behalf as part of the UKRI grants system.

The governance of these grants is carefully structured by the Agency to include:

- fair and open calls for applications to fund projects;
- advisory panels to provide technical and independent advice on which applications to fund;
- due diligence undertaken on grant recipients to ensure compliance with State Aid rules;
- programme staff to scrutinise grant recipients' progress in delivering project milestones, and to ensure that grant recipients do not breach the grant offer letter's terms and conditions;
- an independent annual audit of grant payments submitted by the grant recipient.

Payment policy

The Agency's policy is to comply with the Institute of Credit Management's Prompt Payment Code. In accordance with the Government direction, the Agency is committed to paying its suppliers within five days of receipt of a valid invoice or earlier if suppliers' terms dictate. During 2018-19, UKSBS processed 1,346 invoices (1,355 in 2017-18) on behalf of the Agency with 79.94% of payments made within five working days of UKSBS receiving the invoice (83.25% in 2017-18) and 96.66% within 30 days (94.46% in 2017-18). The year on year decline in payments made within five working days is predominantly due to inefficiencies in the purchase to pay process.

International Subscriptions

The Agency subscribes to various programmes run by the European Space Agency (ESA). ESA is a non-governmental organisation with no requirement for its members to be also members in the European Union (EU). The UK was one of the founding members when ESA was established on 30 May 1975. Through ESA, its Member States agreed to provide for and to promote, for exclusively peaceful purposes, co-operation among them in space research and technology and this space applications. Subscribing to ESA programmes allows UK industry to benefit from contracts awarded to the value of the overall subscription.

The Agency's subscriptions to ESA are determined at Councils of Ministers which are held periodically. The last Council of Ministers meeting took place in December 2016 and was attended by Jo Johnson MP, then Minister for Universities and Science. It set the UK subscriptions levels up to the end of 2019.

The Agency actively oversees spending of these subscriptions through its membership of a range of ESA governance committees and project oversight boards. In addition, ESA's financial accounts are subject to independent audit.

Openness and transparency

The Agency is subject to the Freedom of Information Act 2000 and the Environmental Information Regulations 2004. In 2018-19, we responded to 41 requests, 30 of which were answered within the statutory time limits. Additional resource has now been put in place to ensure not only more timely responses but also to educate staff on the importance of these requests.

General Data Protection Regulation (GDPR)

The Data Protection Act 2018 received Royal Assent on 23 May 2018, accommodating the changes brought about by the introduction of GDPR on 25 May 2018. The Agency policies and processes for 2018-19 therefore fully incorporated both the GDPR and the Data Protection Act 2018.

Business continuity and disaster recovery

In addition to the UKRI and UK SBS business continuity and disaster recovery plan, the Agency has in place a business continuity management plan. This was successfully tested in March 2019. This out-of-hours test established control and communications within a satisfactory period of time. Communication tests with all staff across all Agency sites using a bulk SMS system are conducted periodically throughout

the year, and utilised whenever there is a need, such as building closure due to severe weather.

Welfare

During 2018-19, there were no reportable injuries within the Agency under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) 2013, as in 2017-18.

Information security

The Agency is expected to meet a range of mandatory cyber security outcomes as described in the Government's Security Policy Framework. This framework is supplemented by policy, advice and guidance provided by the Cabinet Office and the National Cyber Security Centre. Government has developed and promoted two standards for cyber security - the Cyber Essentials and Ten Steps to Cyber Security. The Agency's core IT provision is managed and delivered by external suppliers contracted via BEIS. A new provider, Cirrus, replaced Evolve in April 2018 which offers improved security controls. Our overarching security policy and procedural framework governing this IT provision is set by BEIS.

All staff members, both existing and new, are required to undertake the 'Responsible for Information General User' training annually. An annual report on security outcomes (the Departmental Security Health Check) is made to BEIS each year. In 2018-19, there were no breaches of personal data or IT security during the reporting period, although there was one instance of a hardware loss when a member of staff had their car broken into. This loss was reported to a local police station and an incident report crime reference number was issued. The incident/loss was also reported to the Department's IT section to ensure that the asset was also disabled. No sensitive or confidential documents had been lost with the laptop. Following review, this incident was not classified as a security breach.

Counter fraud and bribery

The Agency's control environment is spread across three entities: The Agency's finance team; UKSBS and BEIS finance which provides independent oversight in the prevention and detection of fraud. Any transactions that are deemed to be unusual are reported to the Agency's finance team.

Staff have access to 'Counter Fraud' training annually. There were no instances of fraud identifies within the Agency in 2018-19.

Gifts and hospitality

The Civil Service Code (www.gov.uk/government/publications/civil-service-code) states that civil servants must not accept gifts or hospitality or receive other benefits from anyone which might reasonably be seen to compromise their personal judgement or integrity. All Agency employees are made aware that they must not accept offers of gifts or hospitality without considering whether it would be both legal and proper to do so, and without seeking appropriate clearance as appropriate. The Agency follows the BEIS hospitality policy for the treatment and recording of any offers of gifts and receipt of hospitality. The Gifts and Hospitality Register is completed quarterly and submitted to BEIS for independent scrutiny.

During 2018-19, there has been an increased focus on reporting disclosures within the Agency, including submissions of nil returns. This allows monitoring of submitted declarations by all staff irrespective of whether any gifts or hospitality has been received in the reporting period. Non-compliance is reported to the relevant EB member.

Conflicts of interest

All staff must comply with the Civil Service Code and BEIS standards of conduct. Any outside employment, business interests and financial interests or political activities must be declared and approved by a Director. At each Board meeting the Agency's executive directors and non-executive members are required to provide declarations of private, professional and commercial interests, which are maintained on a register of interests.

Whistleblowing and raising concern policy

The Agency follows the BEIS Whistleblowing and Raising Concern Policy, which has been aligned with the latest version of the Civil Service Employee Policy (CSEP) and includes information about the Whistleblowing Hotline. There were no instances of whistleblowing under this policy in 2018-19, as in 2017-18.

Macpherson Review

The review of quality assurance of Government analytical models undertaken by Sir Nicholas Macpherson and published by HM Treasury in March 2013 made several recommendations for government departments. In line with these recommendations, the Agency conducts an annual review of its use of analytical modelling and did not identify any that were considered to be business critical.

Tax arrangements for Public Sector Appointees

In line with the Alexander Review (2012) recommendations, all Senior Civil Servants and Non-Executive Members are paid through formal payroll resulting in appropriate tax and National Insurance contributions are deducted at source.

The Agency assesses the employment status of all off-payroll workers to ensure compliance with IR35 tax regulations. If the assessment finds the role status falls within scope of IR35, the Agency deducts income tax and National Insurance contributions at source. If the role is deemed out of scope of IR35 then individuals are paid their contracted gross rate.

Assurance

Director's Annual Assurance Statements of Internal Control (DAASIC)

The Agency's directors self-assessed the effectiveness of internal controls as at 31 March 2019 within their area of responsibility with relevant justifications for given assurance levels. This review assists in identifying areas with high assurance as well as for improvement which are monitored in the continuous improvement plan for 2018-19. Directors are asked to ensure that within their areas of responsibility there are measures that:

- underpin reliability of financial and other information;
- achieve compliance with internal policies and external legislation and regulations;
- ensure the development, implementation and monitoring of controls which manage the risks for which they are the lead director.

Directors provide an Agency-defined assurance level of substantial, moderate, limited or unsatisfactory over the adequacy and appropriateness of key internal controls within their area of responsibility. A summary is set out below.

Each of the eight Agency directors provided individual ratings for 37 key controls which are categorised into seven control areas and the average rating is recorded in the table above. In summary, there were only two individual limited assurances out of the 259 assurances provided (2017-18: seven limited assurances out of 216 assurances provided). The first relates to business agreements (MOUs/SLAs) where work to refresh the management oversight process has been identified as required. Work has been commissioned to review all such agreements so that in future an assurance can be given with certainty. The second limited assurance relates to budgeting and reporting where improvement opportunities were identified in year and implementation is now well underway.

Mid-year reviews of the control assurance statements were undertaken in October, with no material weaknesses in the internal controls identified. The end of year self-assessed assurances are moderated to provide a consistent justification for each assurance rating. The assurances are annually reviewed to ensure they continue to capture all relevant areas of internal control and take into account any new policy developments.

There has been an increase in the number of substantial assurances provided in 2018-19 compared with 2017-18 assessments, notably within the Human Resources control area. This has improved from Moderate to Substantial overall, and the seven limited assurances in this area identified in 2017-18 have been fully addressed. Training & Staff Development remains an area of moderate concern for a number of Directorates.

Compliance with Health & Safety policies was raised as a concern, and remedial action is in hand to provide assurance that all staff have completed mandatory training. We are also working with the

CONTROL AREA	OVERALL ASSURANCE RATING
1. Financial Control	Substantial
2. Knowledge & Information Management	Substantial
3. Human Resources	Substantial
4. Health & Safety	Moderate
5. Engaging with Users/Promotion of Science	Substantial
6. Planning & Performance	Substantial
7. Awarding & Managing Grant Funding	Substantial

site owners of our office locations to ensure that appropriate site-specific notices and information are prominently displayed and readily accessible.

Internal audit and assurance programme

Internal audit was provided independently by GIAA. GIAA reports annually to the Accounting Officer. The cost of internal audits undertaken during 2018-19 was £50,075 (2017-18: £44,713).

No remuneration was paid to the internal auditors in respect of non-audit work during 2018-19.

The internal audit assurance programme is managed by GIAA and developed annually in consultation with the Agency and its Audit Committee. The recommendations arising from these audits, and their subsequent management plans, are scrutinised by the Executive Board, Audit Committee, and as appropriate by the Steering Board. A summary of the audit outcomes is provided below.

In agreeing the 2018-19 audit programme with GIAA, the Agency initiated a number of audits on areas it believed the effectiveness of controls could be improved. Five audits were subsequently undertaken by GIAA, and their reports identified a number of areas where management controls could be further strengthened. No misappropriation, or risk of misappropriation of funds, was identified by GIAA as part of any of these audits.

The Agency takes all audit recommendations seriously. Action plans will be developed to address the findings of all audits where the Agency received, and accepted recommendations and the Agency is committed to implementing these in 2018-19. Further details can be found in the table below.

In addition, GIAA undertook two advisory audits for which recommendations were not made and an assurance rating not provided. The Agency received an overall moderate assurance relating to the totality of the audit programme from GIAA. A summary of the audit work undertaken during 2018-19 is shown below.

Assurance Key	GIAA Assurance Definitions
Substantial	The framework of Governance, Risk Management and Control is adequate and effective.
Moderate	Some improvements are required to enhance the adequacy and effectiveness of the framework of Governance, Risk Management and Control.
Limited	There are significant weaknesses in the framework of Governance, Risk Management and Control such that it could become inadequate.
Unsatisfactory	There are fundamental weaknesses in the framework of Governance, Risk Management and Control such that it is inadequate and ineffective or is likely to fail.
Advisory	Advisory work on risk and control issues driven by risk based planning, typically on areas where risk and control are not in existence or well established (this could relate to new systems or areas undergoing significant change where there is no system of internal control).

Summary of Internal Audit work undertaken in 2018-19

CORE PROGRAMME	ASSURANCE and 2018-19 SUMMARY OF AUDIT FINDINGS
GDPR	There is a strong commitment to managing data protection effectively. For an organisation of its size, some of the management to data protection is exemplary. There has however been some concern in the Agency over its relationship with UKSBS, especially as there are known non-compliances associated with the Oracle system used by UKSBS.
Business Critical Project: Constellation Licensing	The approach taken and the processes applied by UKSA to constellations licensing are robust and ensure the licensing of only qualified applicants.
Satellite Launch Programme	Recommendations have been made to enhance control across the scope areas reviewed. Suggestions were made where these could also be applied to the Spaceflight Programme.
Delegated Authority	The new delegations process is bedding in within UKSA.
Contracted Recruitment	The original case for change will be revisited taking account of performance during the previous 12 months and a consideration of what service is required in the future.
Follow up of 2017-18 recommendations	Advisory. The majority of actions from the areas given limited assurance in 2017-18 have been completed. There are still overdue actions that are yet to be implemented from earlier years which will be cleared in 2019-20. More details can be found in the table below.
Departmental Security Health Check	The Agency needs to strengthen due diligence over shared service procurement and ensure that DSHC requirements are clear in advance to support achievement of filing deadline.
Preparation for GNSS	Advisory. A review of organisational readiness for UK GNSS. This area is a likely candidate for future assurance in 2019-20 and this engagement will prepare for that work.

Outstanding Audit Recommendations from previous financial years, including recommendations issued in 2018-19

YEAR	2015-16	2016-17	2017-18	2018-19
Number of audits with outstanding actions and actions cleared in 2018-19	2 4 cleared actions, 3 overdue actions	214 cleared actions,6 overdue actions	313 cleared actions,5 outstanding actions	4 19 outstanding actions
Details of audit	Risk Management	Business Cases	Financial Management	Satellite Launch Programme
	HR: Performance management and Personal development	Business Continuity and IT Disaster recovery	Human Resources: Working hours and absence management.	Delegated Authority
			Pre-approval of Travel	Contracted Recruitment
				GDPR

The majority of outstanding audit recommendations brought forward from previous years have been addressed during the year. A small number remain outstanding particularly in the risk and HR areas and plans are in place to fully implement them.

IPA Gateway Review

The GNSS Programme was subject to a Gateway Zero review in June 2018. It gave a delivery confidence assessment of amber/red and made three critical and six essential recommendations. Subsequently there has been activity to address the recommendations, including most recently through the UK GNSS Programme Assurance Board who will consider the Integrated Assurance and Approvals Plan when they next meet.

External Reviews

The Agency contracted out for a security review of the Agency which was conducted using the industry best practice ISO27001 methodology by two certified Lead Auditors. In April 2019, a written report with recommended actions was presented to the Agency CEO. An implementation plan has been established to address these findings.

External Audit

In 2018-19, the National Audit Office have outsourced the audit of the Agency's Financial Statements to Ernst & Young, whilst retaining the overall responsibility of certifying the accounts. The final management letter has been received which raised no material issues that will have implications for internal control.

Accounting Officer's conclusion

As Chief Executive, I am assured that the Agency has appropriate levels of internal control and governance to manage the business, consistent with my responsibilities as the Accounting Officer. I have been provided with evidence of:

- board and committee effectiveness in managing risks, finance and operational performance
- the policies in place impacting on risks such as counter fraud, counter bribery, conflicts of interest and whistleblowing
- the work of internal audit, which in 2018-19 awarded the Agency an overall 'moderate assurance'
- the assessments of my individual directors in the DAASIC providing an overall rating of 'substantial assurance'.

Equally, I am confident from the evidence provided by my Chief Operating and Financial Officer (COFO) and the assurance from the external auditors that the accounts for the year ended 31 March 2019 are a true and fair reflection of the organisation and accord with Treasury guidance. I conclude that the Agency has satisfactory governance and risk management systems in place to safeguard public money.

Whilst the Agency will continue to focus on assurance processes, I recognise we have a number of important assurance goals to achieve. My review has identified the following internal control and governance improvements that the Agency will address during 2019-20:

- Assess the Agency's internal assurance processes to ensure they continue to meet the needs of a maturing organisation and are in line with the government policies and best practice.
- Conduct an annual assurance review of compliance with the HM Government's Functional Standard for Counter Fraud (GovS 013).
- By the end of quarter 3, take forward recommendations from the Security Audit concluded in April 2019.
- Grant assurance this will be taken forward by the newly-appointed commercial officer.
- Analyse purchase to pay processes between the Agency and UKSBS in order to improve adherence to prompt payment guidance.
- Improve health and safety procedures by ensuring that all staff have completed mandatory training.
 We are also working with the site owners of our office locations to ensure that appropriate sitespecific notices and information are prominently displayed and readily accessible.

Delivering against these in 2019-20 will enable the Agency to build upon the good progress made over the last year and keep the Agency moving towards its aspiration of achieving a 'substantial' level of assurance in the future

Graham Turnock

Chief Executive and Accounting Officer 25 June 2019

REMUNERATION AND STAFF REPORT

Senior Civil Service remuneration policy

Remuneration Policy

The remuneration arrangements for Senior Civil Servants (SCS) are set by the Prime Minister following independent advice from the Senior Salaries Review Body (SSRB).

The Review Body takes account of the evidence it receives about wider economic considerations and the affordability of its recommendations. Further information about the work of the Review Body can be found at: www.gov.uk/government/organisations/review-body-on-senior-salaries

Performance and reward

The Senior Civil Service pay system consists of relative performance assessments. The highest performing individuals in BEIS were awarded a non-consolidated performance reward for their performance against objectives in 2017-18 which was paid in 2018-19. These awards varied in amount within an overall cost envelope set by the Senior Salaries Review Body and approved by the Government. As part of the 2018 SCS Pay Award, an annual flat rate base pay increase was introduced for the SCS1 and SCS2 pay grades of £850 and £950 respectively. No base pay increases were paid to those assessed to be the lowest 10% of performers.

Further information about the performance and reward arrangements for Senior Civil Servants can be found at: www.gov.uk/government/collections/senior-civil-service-performance-management-and-reward

Service Contracts

The Constitutional Reform and Governance Act 2010 requires Civil Service appointments to be made on merit based on fair and open competition. The Recruitment Principles published by the Civil Service Commission also specify the circumstances when appointments may be made otherwise.

Unless otherwise stated below, the officials covered by this report hold appointments which are openended. Early termination, other than for misconduct, would result in the individual receiving compensation as set out in the Civil Service Compensation Scheme. The notice period for all Senior Civil Servants covered by this report is in line with the Civil Service terms and conditions.

Further information about the work of the Civil Service Commission can be found at: https://civilservicecommission.independent.gov.uk/

Audited Information

Salary and pension entitlements

The following table shows the remuneration of Executive Board members as at 31 March 2019, including the details of their salary and pension entitlements. All Board members are Senior Civil Servants.

Table 1: Remuneration of Senior Civil Servants 2018-19

Name	_	in bands ,000	rew payme	mance rard ents ⁽ⁱⁱ⁾ to £1,000	Benefits to neare		Pens benefi nearest	ts ⁽ⁱⁱⁱ⁾ to	Single figur remuner bands of	re of ration in
	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2017-18
Graham Turnock	90 - 95	85-90	-	-	-	-	34	19	120 - 125	105-110
Nicola Higgins ^(iv)	80 - 85	15-20	-	-	-	-	32	7	110 - 115	25-30
Chris Castelli	70 - 75	70-75	-	-	-	-	28	26	100 - 105	95-100
Claire Barcham ^(v)	70 - 75	Not in post	-	Not in post	-	Not in post	28	Not in post	100 - 105	Not in post
Rebecca Evernden ^(vi)	65 - 70	55-60	9	7	-	-	25	18	100 - 105	80-85
Catherine Mealing-Jones	70 - 75	70-75	-	-	-	-	22	13	90 - 95	80-85
Peter Finn	70 -75	70-75	-	-	-	-	21	17	90 - 95	85-90
Alice Bunn (vii)	45 - 50	45-50	6	6	-	-	27	14	75 - 80	65-70
Martin Petto ^(viii)	10 - 15	Not in post	-	Not in post	-	Not in post	4	Not in post	10 - 15	Not in post

Notes

- i. Salary levels disclosed have been recorded on an actual basis.
- ii. Performance rewards are non-consolidated payments.
- iii. The value of pension benefits accrued during the year is calculated by MyCSP as (the real increase in pension multiplied by 20) less (the contributions made by the individual). The real increase excludes increases due to inflation or any increase or decrease due to a transfer of pension rights.
- iv. Nicola Higgins was appointed as Director of Regulation from 8 January 2018. Her annualised salary in 2017-18 would have been £75-80k.
- v. Through fair and open competition, Claire Barcham was appointed as Director of Commercial Space from 1 July 2018. She held the role on a temporary promotion basis from 1 April 2018.
- vi. Rebecca Evernden, joint Director of EU & International, worked as job share on a part-time basis at 0.8 full time equivalent (FTE) from 1 April 2018 to 22 May 2018 after which date, she worked full time. Her FTE annualised salary in 2018-19 would have been £65-70k (2017-18: £65-70k).
- vii. Alice Bunn, joint Director of EU & International, worked as job share on a part-time basis at 0.6 FTE increased to 0.7 FTE from 27 September 2018. Her FTE annualised salary in 2018-19 would have been £65-70k (2017-18: £65-70k).
- viii. Through fair and open competition, Martin Petto was appointed on a temporary promotion basis as Director of Organisational Development from 4 February 2019. His annualised salary in 2018-19 would have been £65-70k.

Salary

Salary includes gross salary, overtime, London weighting or allowances, recruitment and retention allowances, private office allowances, ex-gratia payments and any other allowances or payments to the extent that it is subject to UK taxation. This report is based on accrued payments made by the Agency and thus recorded in these accounts.

Bonuses

Bonuses are non-consolidated award payments, based on performance levels attained and are made as part of the appraisal process. The bonuses reported in 2018-19 relate to performance in 2017-18 and the comparative bonuses reported for 2017-18 relate to performance in 2016-17.

Benefits in kind

The monetary value of benefits in kind covers any benefits provided by the Agency and treated by HM Revenue and Customs as a taxable emolument. No Senior Civil Servant covered by this report received any benefits in kind during the year.

Single total figure of remuneration

Single total figure of remuneration includes salary, non-consolidated performance-related pay, benefits-in-kind, compensation payments and pension benefits accrued during the reporting period. It does not include severance payments; employer pension contributions; the cash equivalent transfer value of pensions; and the payment of legitimate expenses.

Pay multiples

The Agency is required to disclose the relationship between the remuneration of the highest-paid director in the Agency and the median remuneration of the Agency's workforce.

	2018-19	2017-18
Band of Highest Paid Directors' Total Remuneration ⁽ⁱ⁾	£90-95k	£85-90k
Median Total Remuneration ⁽ⁱⁱ⁾	£47,600	£39,788
Ratio	1.94	2.20

Notes:

- i. The highest paid director in 2018-19 was Graham Turnock, the Chief Executive (2017-18: Ross James, the former Director of Commercial Space).
- ii. Remuneration is the total annual salary including allowances per employee as at 31 March 2019 and adjusted for Full Time Equivalent (FTE).

The banded remuneration of the highest paid director in the Agency in 2018-19 was £90k - £95k (2017-18: £85k - £90k). This was 1.94 times (2017-18: 2.17 times) the median remuneration of the workforce, which was £47,600 (2017-18: £40,313).

The increase in the Agency's median pay in 2018-19, compared with the previous year, was caused by a disproportionate increase in the number of Grade 6 roles appointed during the year. The remuneration of the higher grades is reflected in the corresponding drop in the pay multiples ratio from 2.17 to 1.94.

In both 2018-19 and 2017-18, no employee received salary in excess of the highest paid director.

Remuneration in the Agency ranged from £20,450 to £90,500 (2017-18: £19,350 to £88,792).

Total remuneration includes full year equivalent salary, non-consolidated performance related pay, benefits-in-kind as well as severance payments. It does not include employer pension contributions and the cash equivalent transfer value of pensions.

Pension Benefits

Civil Service Pensions

Pension benefits are provided through the Civil Service pension arrangements. From 1 April 2015 Cabinet Office introduced a new pension scheme for civil servants, alpha. This new scheme is set out in the Public Service (Civil Service and Others) Pension Scheme (CSOPS) regulations. It provides benefits on a career average basis with a normal pension age equal to the member's State Pension Age (or 65 if higher). From that date, all newly appointed employees and the majority of existing employees joined alpha.

Prior to 1 April 2015, employees participated in the Principal Civil Service Pension Scheme (PCSPS). The PCSPS operates four defined benefit schemes: three providing benefits on a final salary basis (classic, premium or classic plus) with a normal pension age of 60; and one providing benefits on a whole career basis (nuvos) with a normal pension age of 65. The PCSPS is now closed to new members.

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. Existing members of the PCSPS who were within 10 years of their normal pension age on 1 April 2012 remained in the PCSPS after 1 April 2015. Those who were between 10 years and 13 years and 5 months from their normal pension age on 1 April 2012 will switch into alpha sometime between 1 June 2015 and 1 February 2022. All members who switch to alpha have their PCSPS benefits 'banked', with those with earlier benefits in one of the final salary sections of the PCSPS having those benefits based on their final salary when they leave alpha.

Members joining from October 2002 may opt for either the appropriate defined benefit arrangement or a 'money purchase' stakeholder pension with an employer contribution (partnership pension account).

Employee contributions are salary-related and range between 4.6% and 8.05% of actual pensionable earnings regardless of whether members are in classic, classic plus, premium, nuvos or alpha. 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 his 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 in 2.32%. In all cases members may opt to 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. Standard Life is the stakeholder pension provider for the Civil Service. The employer makes a basic contribution of between 8% and 14.75% (depending on the age of the employee at the beginning of the tax year) into a stakeholder pension product. 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 earnings (in addition to the employer's basic age-related contribution). Employers also contribute a further 0.5% of pensionable earnings to cover the cost of centrally provided risk benefit cover such as death in service and ill health retirement referred to as mini- Accruing Superannuation Liability Charges (mini- ASLCs).

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.

All sections of the PCSPS and CSOPS schemes have provision for death and medical retirement benefits. Anyone entitled to be covered by these scheme sis also covered by the Civil Service Injury Benefit Scheme in the event of sustaining an injury at work. Further details about the Civil Service pension arrangements can be found at the website www.civilservicepensionscheme.org.uk

Table 2: Pension benefits of Senior Civil Servants 2018-19. All Executive Board Members are SCS.

Name	Accrued pension at pension age as at 31/03/2019 and (if applicable) related lump sum in bands of £5,000	Pension increase in real terms and (if applicable) related lump sum at pension age in bands of £2,500	CETV at 31/03/2019 to the nearest £1,000	CETV at 31/03/2018 to the nearest £1,000	Real increase in the CETV as funded by the employer, to the nearest £1,000	Employer contribution to partnership pension account to the nearest £100
Graham Turnock	30 - 35 plus a lump sum of 75 - 80	0 - 2.5 plus a lump sum of 0	596	509	18	-
Nicola Higgins	5 - 10	0 - 2.5	59	34	13	-
Chris Castelli	10 - 15	0 - 2.5	161	125	16	-
Claire Barcham	10 - 15	0 - 2.5	108	79	8	-
Rebecca Evernden	15 - 20	0 - 2.5	238	192	10	-
Catherine Mealing-Jones	25 - 30 plus a lump sum of 65 - 70	0 - 2.5 plus a lump sum of 0	533	460	10	-
Peter Finn	30 - 35 plus a lump sum of 70 - 75	0 - 2.5 plus a lump sum of 0	553	480	9	-
Alice Bunn	20 - 25	0 - 2.5	253	205	14	-
Martin Petto	5 - 10	0 - 2.5	85	83	1	-

Cash Equivalent Transfer Values

A Cash Equivalent Transfer Value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme. The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies.

The figures include the value of any pension benefit in another scheme or arrangement which the member has transferred to the Civil Service pension arrangements. They also include any additional pension benefit accrued to the member as a result of their buying additional pension benefits at their own cost. CETVs are worked out within the guidelines and framework prescribed by the Institute and Faculty of Actuaries and do not take account of any actual or potential reduction to benefits resulting from Lifetime Allowance Tax, which may be due when pension benefits are taken.

Real increase in 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, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

Remuneration of Steering Board and Audit Committee Non-Executive Members

Appointments to the Agency's Steering Board and Audit Committee are made by BEIS Ministers, in accordance with the Commissioner for Public Appointments' Code of Practice for Ministerial Appointments to Partner Organisations. In line with the other governance bodies within BEIS family of partner organisations, from 1 April 2013 the Agency's non-executive members receive an honorarium of £6,000 per annum. The Chair of the Steering Board receives an additional honorarium of £2,000 per annum. Non-executive members are also reimbursed for any legitimate expenses incurred on behalf of the Agency.

Table 3: Remuneration of Steering Board and Audit Committee Non-Executive Members 2018-19

Non-Executive Member	Position	Period of Appointment	Hone	oraria
			2018-19 £000	2017-18 £000
David Southwood ⁽ⁱ⁾	Chair of Steering Board	Nov 2011 - June 2018	8	8
Clive Tucker ⁽ⁱⁱ⁾	Chair of Audit Committee	Dec 2014 - Nov 2020	6	6
Frances Saunders ⁽ⁱⁱⁱ⁾	Non-Executive	Dec 2014 - Nov 2020	6	6
Malcolm MacDonald ^(iv)	Non-Executive	July 2017 - June 2020	6	4.5
Keira Shepperson ^(v)	Non-Executive	May 2018 - May 2021	Nil	Not in post

Notes

- i. David Southwood was appointed as Chair of Steering Board with effect from 6 June 2016, initially for a period of two years. In June 2018 his appointment was extended to 31 March 2019. Previously he was attending the Steering Board as a Non-Executive Member.
- ii. Clive Tucker was reappointed for a second three-year term from 1 December 2017.
- iii. Frances Saunders was reappointed for a second three-year term from 1 December 2017.
- iv. Malcolm Macdonald was appointed as a Steering Board member with effect from 1 July 2017 for a period of three years.
- v. Keira Shepperson joined the Audit Committee as an independent member with effect from 1 May 2018 for three years. She is an employee at the British Business Bank. She is not remunerated for her work as honorarium is not payable to members who are civil servants, employees of the UK Space Agency or full-time employees of organisations whose funds are derived from Votes of Parliament.

Staff report

The Agency's employees are eligible to be members of the Principal Civil Service Pension Scheme (PCSPS) and Public Service (Civil Service and Others) Pension Scheme (CSOPS) known as alpha which came into force from 1 April 2015. Many PCSPS members transferred into alpha on that date, while others will transfer into it over the next few years. The PCSPS is now closed to new members.

In this document, the term 'Scheme' covers both PCSPS and CSOPS arrangements.

The Scheme is unfunded, defined benefit, contributory, public service occupational pension scheme in which the UK Space Agency is unable to identify its share of the underlying assets and liabilities.

The Scheme is subject to periodic actuary valuations. Contributions are paid both by employers and employees at a combined level, determined by the scheme actuary, sufficient to meet the liabilities being built up by the active membership (as adjusted to reflect any surplus or shortfall in the Scheme). The scheme actuary reviews employer contributions every four years following a full scheme valuation.

The last full actuarial valuation was carried out as at 31 March 2016 and determined that from 1 April 2019 the average employer contribution will increase to 27.3% of pensionable earnings. During 2018-19, the average employer rate of 21.1% was maintained in line with the recommendations made in the actuarial valuation as at 31 March 2012. The contribution rates are set to meet the cost of the benefits accruing during 2018-19 to be paid when the member retires, and not the benefits paid during this period to existing pensioners.

More information can be found at the Civil Service Pensions website at: www.civilservicepensionscheme.org.uk During 2018-19, employer contributions of £1,624,143 were payable to the Scheme (2017-18: £1,088,361) at one of four rates in the range 20.0% to 24.5% of pensionable earnings (2017-18: 20.0% to 24.5%), based on salary bands.

Under the Partnership scheme employees have the option of opening a partnership pension account with Standard Life. Stakeholder pensions are a type of personal pension with employer contributions which are age related and from 1 October 2015 range from 8% to 14.75% of pensionable earnings (3% to 12.5% up to 30 September 2015). Employee contributions are voluntary, and unlimited, and are matched by employer contributions up to 3% of pensionable earnings (the maximum possible employer contribution therefore is 17.75%). During 2018-19, employer contributions of £2,300 were payable to partnership pension providers (2017-18: £4,340). There were no prepaid contributions at 31 March 2019.

In addition, employer mini-ASLC contributions of £190 (2017-18: £197), from 1 October 2015 set at 0.5% of pensionable pay regardless of salary bands (0.8% up to 30 September 2015), were payable to the Scheme during 2018-19 for provision of risk benefits to those employees opting for partnership pension arrangements. These contributions cover the cost of the future provision of lump sum benefits on death in service or ill-health retirement of these employees. No employee (2017-18: none) retired early on ill-health grounds, therefore there were no additional pension liabilities accrued during the reporting period (2017-18: none).

There were no redundancy or other departure costs paid during the year (2017-18: none).

Table 4: Analysis of staff costs and average number of persons

The Agency has continued to grow in order to deliver on its projects and programmes which is reflected in the tables below.

		2018-19		2017-18		
	Permanently employed £000	Other £000	Total £000	Permanently employed £000	Other £000	Total £000
Wages and salaries	7,695	-	7,695	5,336	-	5,336
Social security costs	868	-	868	582	-	582
Other pension costs	1,627	-	1,627	1,093	-	1,093
Subtotal	10,190	-	10,190	7,011	-	7,011
Add cost of inwards secondments	-	260	260	-	113	113
Less recoveries in respect of outward secondments	_	(65)	(65)		(117)	(117)
Total staff costs	10,190	194	10,384	7,011	(4)	7,007
	FTE	FTE	FTE	FTE	FTE	FTE
Average number of persons employed(i)(ii)	173.6	1.6	175.2	123	1.13	124.13

Notes

- i. On average there have been 1.7 FTE outward secondees (2 FTE in 2017-18) when the Agency's staff have been seconded to other organisations.
- ii. In addition to the 1.6 FTE inward secondees in the above table (1.13 FTE in 2017-18), the Agency also benefited from an average of 3 FTE inward secondees (1.9 FTE in 2017-18) provided at nil cost by other government organisations and industry as part of their staff development programme.

Unaudited information Recruitment policies Recruitment Position for UK Space Agency – 2018-19

Number of recrui	tment campaigns	run in 2018-19			108		
Total number of c	applicants: 1187						
		Civil Service Inter	nal: 804	External: 383			
Potential posts available: 123 To			Total posts filled:	80			
			THE AGENCY Internal on Lateral Transfer:	From OGDs:	External:		
		24	2	41	13		
Number of posts	filled on:	Permanent basis:		35			
		Loan Basis:		31			
		Other: Fixed Term	า	14			
Time to Hire:							
On average we fi	ill our posts within:		46.27 Days				
The average targ	et for Civil Service	to fill is:	54.31 Days				
All existing off-payroll appointments more than £245 per day, excluding those not reached six months as at 31 March 2019.							
Total	Number that have existed for less than 1 year	Number that have existed for between 1 and 2 years	Number that have existed for between 2 and 3 years	Number that have existed for between 3 and 4 years	Number that have existed for 4 or more years		

All new off-payroll appointments more than £245 per day, between 1 October 2017 and 31 March 2019, and lasted longer than six months						
Total	Number assessed as in scope for IR35	Number assessed as outside scope for IR35	Number engaged directly (via PSC contracted to department) and on BEIS payroll	Number reassessed for consistency purposes during the year	Number that saw a change to IR35 status following consistency review	
13	2	11	0	0	0	

No consultancy costs have been incurred during 2018-19 (2017-18: nil). The cost of contingent labour during the year was £50,529 (2017-18: £141,272).

Remuneration policy

The remuneration policy adopted by the Agency is in line with the BEIS departmental policy. The Agency's 2018 pay award was part of a 2-year deal comprising two pay rises, the first back dated to 1 August 2017 and the second from 1 August 2018.

The second pay rise was implemented and backdated to 1 August 2018. Non-consolidated performance payments were awarded to the top 25% performers based on individual contributions to the Agency as formally assessed by the annual performance reviews.

The Agency runs an in-year award scheme for non-SCS staff which is a cash and non-cash bonus scheme for individual payments recommended by line managers and colleagues for specific projects or outstanding pieces of work. This scheme was implemented in April 2018. These are managed and awarded quarterly following Award Panels that are chaired by the Directors. These payments are nonconsolidated and the maximum amount available is capped to 0.6% of the total annual pay bill (excluding SCS pay). During 2018-19 we issued 155 awards at a cost of £97,050 (2017-18 we issued 117 awards totalling £27,350)

Staff Composition

The internal Workforce Planning Committee plays a key part in ensuring that the Agency has both the capacity and capability to deliver the aims and objectives of the Agency.

We have continued to bring in specialist skills where necessary to support frontline delivery and fill business critical posts whilst maintaining the Agency's headcount at a sustainable level.

UK Space Agency grades	2018-19 Actual number	% of the Agency workforce
Administrative Assistants and Administrative Officers	2	1.04
Executive Officers	10	5.23
Higher Executive Officers and Senior Executive Officers	93	48.70
Grade 7/6	77	40.32
Senior Civil Servants	9	4.71

Note:

Includes one apprentice as at 31 March 2019 and three fast streamers as at 31 March 2019.

2018-19 Gender	Number	Percentage
Male	104	54
Female	87	46

2018-19 Working Pattern	Number	Percentage
Full-time	184	96
Part-time	7	4

2018-19 Ethnicity	Number	Percentage
Arab	1	0.5
Pakistani	1	0.5
White-English	25	14
White-Irish	1	0.5
White-Welsh	3	1.5
White and Asian	3	1.5
Other Asian	2	1
White and Black Carribean	1	0.5
Other White Background	8	4
Prefer not to Say/Unknown	146	76

2018-19 Disability	Number	Percentage
Yes	6	3
No	120	63
Prefer not to Say	65	34

Workforce diversity (Executive Board only)	2018-19 (% declared)	2017-18 (% declared)
Black and minority ethnic	0	0
Women	50	50
Disabled	0	0
Working pattern - part-time	38	50

Sickness Absence

In the 12-month period April 2018 - March 2019 the average working days lost through recorded sickness absence was 5.7 days (per employee absent through sickness). In the same period April 2017 - March 2018 average working days lost through recorded sickness absence was 5 days (per employee absent through sickness).

Equality, diversity and Inclusion

The UK Space Agency is fully committed to providing equal opportunities for all staff. The Agency follows the Civil Service guidelines, ensuring that all staff have equality of opportunity on the basis of their suitability and skills, without discrimination on the basis of age, disability, gender, flexible working, marital status, sexual orientation, race, colour, nationality, ethnic or national origin or religious belief.

PARLIAMENTARY ACCOUNTABILITY

These pages present information about the Agency that is useful to readers for accountability and decision making purposes that is not covered elsewhere in the report.

Our Chief Executive is personally accountable to Parliament for our performance. Our financial statements are subject to audit by the Comptroller and Auditor General, who heads up the National Audit Office and is responsible for scrutinising public spending and safeguarding the interests of taxpayers on behalf of Parliament. The Comptroller and Auditor General's audit certification is presented on page 70.

Regularity of expenditure (audited)

Fees and charges income

The Outer Space Act 1986 is the legal basis for regulation of activities in outer space carried out by organisations or individuals established in the United Kingdom or one of its Overseas Territories or Crown Dependencies. It confers licensing and other powers on the Secretary of State for Business, Energy and Industrial Strategy acting through the Agency. In 2018-19, the total statutory licence fees collected by the Agency amounted to £305,500 (2017-18: £143,000). More information can be found in Note 5 to the Financial Statements, Income from operating activities, on page 86.

Losses and special payments

There were no reportable losses or special payments incurred during the year.

Remote contingent liabilities

Under international (UN) convention the UK Government is ultimately liable for third party costs from accidental damage arising from UK space activities. To manage the risk to the Government, the Outer Space Act 1986 requires licensees to indemnify Her Majesty's Government (HMG) against any proven third-party costs. In March 2015, the Outer Space Act 1986 was amended to cap the previously unlimited liability to indemnify HMG for licenced activities.

The cap is set at €60 million for the majority of missions and can be increased for higher risk missions. This amendment came into force from 1 October 2015 and was designed to adequately balance the risk to the UK Government whilst ensuring UK space operators remain competitive internationally. There is a requirement on licensees to obtain third party liability insurance (set at €60 million for the majority of missions) for the duration of the licenced activity, with the UK Government a named beneficiary.

The UK Government is therefore exposed to a potential liability for third party costs which are not recoverable from the licensee. This liability is unquantifiable at the time of reporting.

EU Exit

On 29 March 2017, the UK Government submitted its notification to leave the EU in accordance with Article 50. The triggering of Article 50 started a two-year negotiation process between the UK and the EU. On 11 April 2019, the government confirmed agreement with the EU on an extension until 31 October 2019 at the latest, with the option to leave earlier as soon as a deal has been ratified.

Any technical changes in legislation, regulation and funding arrangements are subject to the outcome of the negotiations. As a result, an unquantifiable contingent liability is disclosed. In accordance with accounting standards, no contingent assets can be recognised.

THE CERTIFICATE AND REPORT OF THE COMPTROLLER AND AUDITOR GENERAL TO THE HOUSE OF COMMONS

Opinion on financial statements

I certify that I have audited the financial statements of the Agency for the year ended 31 March 2019 under the Government Resources and Accounts Act 2000. The financial statements comprise: the Statements of Comprehensive Net Expenditure, Financial Position, Cash Flows, Changes in Taxpayers' Equity; and the related notes, including the significant accounting policies. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Accountability Report that is described in that report as having been audited.

In my opinion:

- the financial statements give a true and fair view of the state of the Agency's affairs as at 31 March 2019 and of the net operating expenditure for the year then ended; and
- the financial statements have been properly prepared in accordance with the Government Resources and Accounts Act 2000 and HM Treasury directions issued thereunder.

Opinion on regularity

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

Basis of opinions

I conducted my audit in accordance with International Standards on Auditing (ISAs) (UK) and Practice Note 10 'Audit of Financial Statements of Public Sector Entities in the United Kingdom'. My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of my certificate. Those standards require me and my staff to comply with the Financial Reporting Council's Revised Ethical Standard 2016.

I am independent of the Agency in accordance with the ethical requirements that are relevant to my audit and the financial statements in the UK. My staff and I have fulfilled our other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Conclusions relating to going concern

I am required to conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Agency's ability to continue as a going concern for a period of at least twelve months from the date of approval of the financial statements. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern. I have nothing to report in these respects.

Responsibilities of the Accounting Officer for the financial statements

As explained more fully in the Statement of Accounting Officer's Responsibilities, the Chief Executive as Accounting Officer is responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view.

Auditor's responsibilities for the audit of the financial statements

My responsibility is to audit, certify and report on the financial statements in accordance with the Government Resources and Accounts Act 2000.

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (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.

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

- identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Agency's internal control.

- evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

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.

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

Other information

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

Opinion on other matters

In my opinion:

- the parts of the Accountability Report to be audited have been properly prepared in accordance with HM Treasury directions made under the Government Resources and Accounts Act 2000:
- in the light of the knowledge and understanding of the entity and its environment obtained in the course of the audit, I have not identified any material misstatements in the Performance Report and Accountability Report; and
- the information given in the Performance Report and Accountability Report for the financial year for which the financial statements are prepared is consistent with the financial statements and have been prepared in accordance with the applicable legal requirements.

Matters on which I report by exception

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

- adequate accounting records have not been kept or returns adequate for my audit have not been received from branches not visited by my staff; or
- the financial statements and the parts of the Accountability Report to be audited are not in agreement with the accounting records and returns; or

- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

Report

I have no observations to make on these financial statements.

Gareth Davies

Comptroller and Auditor General National Audit Office 157-197 Buckingham Palace Road Victoria London SW1W 9SP

28 June 2019



Our Annual Report and Accounts 2018-19

Our Annual Report and Accounts are presented to Parliament following certification of our financial statements by the Comptroller and Auditor General to the House of Commons (see page 70). The cost of the audit was £40,000. No remuneration was paid to the external auditors in respect of non-audit work in 2018-19.

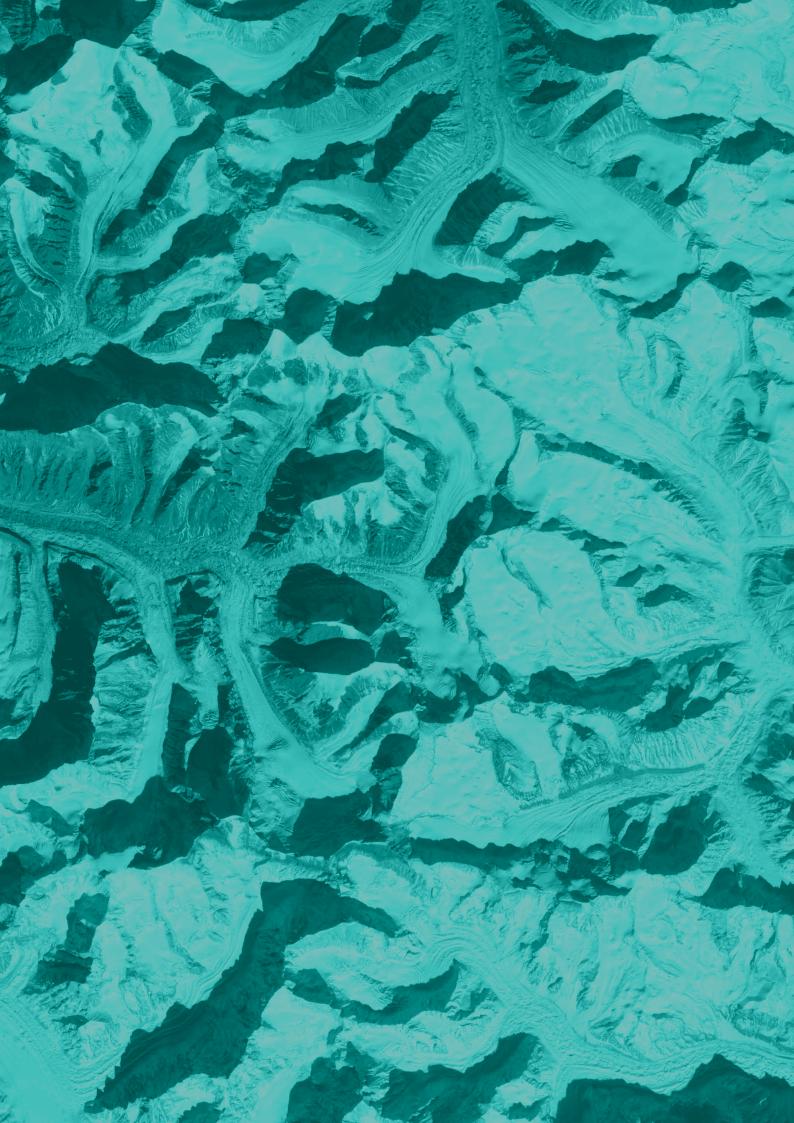
The Chair of the Audit Committee endorsed this report 25 June 2019. Our Annual Report and Accounts is prepared in accordance with the Government Financial Report Manual (FReM), Managing Public Money and any applicable HM Treasury (HMT) instructions.

I believe that the information we have presented in our Performance Report (pages 20 to 37) provides a fair, balanced and understandable analysis of our performance. As required, I have signed and dated our Performance Report on page 36, as well as signing here our Accountability Report, which meets our key accountability requirements to Parliament.

Our fully audited financial statements follow in the rest of this document, which give a true and fair view of the Agency's state of affairs and of its comprehensive net expenditure, changes in taxpayers' equity and cash flows. I have signed our Statement of Financial Position on page 77.







FINANCIAL STATEMENTS

Statement of Comprehensive Net Expenditure for the year ended 31 March 2019

	Note	2018-19	2017-18
		£000	£000
Income from operating activities	5	(4,517)	(1,871)
Total operating income		(4,517)	(1,871)
Staff costs	3	10,385	7,007
International subscriptions, grants and other funding	4	346,088	381,421
Technical contracts and contract management	4	20,268	8,165
Provision expense		14	-
Other operating expenditure	4	3,081	3,054
Total expenditure		379,836	399,647
Net operating expenditure		375,319	397,776
Other comprehensive net expenditure			
Items reclassified to net operating costs during the year:			
Net gain/(loss) released on the disposal of cash flow hedges	4,6	29,076	36,509
Items which may be reclassified subsequently to net operating costs:			
Net (gain)/loss on revaluation of cash flow hedges ⁱⁱ	6	27,353	(29,912)
Total comprehensive net expenditure for the year ended 31 March 2019		431,748	404,373

Notes:

- i. The reported gains on disposal of cash flow hedges are notional gains which represent the total cumulative unrealised gains for the disposed contracts previously recognised in the revaluation reserve. More information can be found in Note 4 Total Expenditure and Note 6 Other financial assets and liabilities.
- ii. The reported losses on revaluation of forward exchange contracts in 2018-19 are notional losses caused by a decrease in the fair value of the contracts held at 31 March 2019 compared to the fair value of contracts held at 31 March 2018. The UK Space Agency abides by the HM Treasury and BEIS group rules relating to hedging. More information can be found in Note 6 Other financial assets and liabilities.

The notes on pages 80 to 92 form part of these financial statements.

Statement of Financial Position for the year ended 31 March 2019

	Note	31 March 2019	31 March 2018
		£000	£000
Non-current assets			
Other financial assets	6	6,953	46,774
Total non-current assets		6,953	46,774
Current assets			
Trade & other receivables	7	48,162	35,959
Other financial assets	6	16,978	30,510
Cash & cash equivalents	8	11,022	12,915
Total current assets		76,162	79,384
Total assets		83,115	126,158
Current liabilities			
Trade & other payables	9	41,285	34,210
Other financial liabilities		951	-
Provisions		14	-
Total current liabilities		42,250	34,210
Total assets less current liabilities		40,865	91,948
Non-current liabilities			
Other financial liabilities	6	2,125	-
Total non-current liabilities		2,125	-
Total assets less total liabilities		38,740	91,948
Taxpayers' equity			
General fund		17,885	14,664
Revaluation reserve		20,855	77,284
Total taxpayers' equity		38,740	91,948

The notes on pages 80 to 92 form part of these financial statements.

Graham Turnock

Chief Executive and Accounting Officer 25 June 2019

Statement of Cash Flows for the year ended 31 March 2019

	Note	2018-19	2017-18
		£000	£000
Cash flows from operating activities			
Net operating expenditure for the year		(375,319)	(397,776)
Adjustments for non cash transactions - auditor's remuneration	4	40	40
(Increase)/Decrease in trade and other receivables	7	(12,203)	(1,647)
Increase/(Decrease) in trade payables	9	7,075	(309)
Use of provisions		14	-
Net cash outflow from operating activities		(380,393)	(399,692)
Cash flows from financing activities			
Net parlimentary funding - drawn down		378,500	383,500
Net financing		378,500	383,500
Net increase/(decrease) in cash and cash equivalents in the period		(1,893)	(16,192)
Cash and cash equivalents at the beginning of the period	8	12,915	29,107
Cash and cash equivalents at the end of the period	8	11,022	12,915

The notes on pages 80 to 92 form part of these financial statements.

Statement of Changes in Taxpayers' Equity for the year ended 31 March 2019

2018-19		Revaluation	
	General fundi	reserve ⁱⁱ	Total
	£000	£000	£000
Balance at 01 April 2018	14,664	77,284	91,948
Net Parliamentary Funding - drawn down	378,500	-	378,500
Net operating expenditure for the year	(375,319)	-	(375,319)
Non-cash adjustments			
Non-cash charges - auditor's remuneration	40	-	40
Movements in reserves			
Disposals	-	(29,076)	(29,076)
Revaluations	-	(27,353)	(27,353)
Balance at 31 March 2019	17,885	20,855	38,740

2017-18	General fund ⁱ	Revaluation reserve ⁱⁱ	Total
	General luna	reserve	Total
	£000	£000	£000
Balance at 01 April 2017	28,900	83,881	112,781
Net Parliamentary Funding - drawn down	383,500	-	383,500
Net operating expenditure for the year	(397,776)	-	(397,776)
Non-cash adjustments			
Non-cash charges - auditor's remuneration	40	-	40
Movements in reserves			
Disposals	-	(36,509)	(36,509)
Revaluations	-	29,912	29,912
Balance at 31 March 2018	14,664	77,284	91,948

Notes:

The notes on pages 80 to 92 form part of these financial statements.

i. The general fund is used to support the on-going operations of the Agency and represents the investment made by the Agency or parent Department.

ii. The revaluation reserve represents the increase of value of financial derivatives in relation to the cashflow hedge instruments.

NOTES TO THE FINANCIAL STATEMENT FOR THE YEAR

1. Statement of Accounting Policies

1.1 Basis of accounting

These financial statements have been prepared in accordance with the 2018-19 Government Financial Reporting Manual (FReM) issued by HM Treasury, as set out in a statutory Accounts Direction issued pursuant to section 7(2) of the Government Resources and Accounts Act 2000.

The accounting policies contained in the FReM apply International Financial Reporting Standards (IFRS) as adapted or interpreted for the public sector context. Where the FReM permits a choice of accounting policy, the accounting policy which is judged to be most appropriate to the particular circumstances of the Agency for the purpose of giving a true and fair view has been selected. The particular policies adopted by the Agency are described below. They have been applied consistently in dealing with items that are considered material in relation to the accounts.

1.2 Going concern

The Agency is an Executive Agency of the Department for Business, Energy and Industrial Strategy (BEIS), and the Department's estimates and forward plans include provision for the Agency's continuation. It has therefore been considered appropriate to prepare these accounts on a going concern basis.

1.3 Accounting convention

These accounts have been prepared under the historical cost convention modified to account for the revaluation of financial assets and financial liabilities.

1.4 Presentational currency

The financial statements are presented in pounds sterling and all values are rounded to the nearest thousand pounds (£'000). The functional currency of the Agency is pounds sterling.

1.5 Financial instruments

The Agency recognises and measures financial instruments in accordance with IFRS 9 Financial Instruments as interpreted by the FReM for public sector.

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. Financial assets and financial liabilities are recognised in the Statement of Financial Position when the Agency becomes a party to the contractual provisions of an instrument.

The fair value of financial instruments is determined by reference to quoted market prices where an active market exists for the trade of these instruments. The fair value of financial instruments which are not traded in an active market is determined using generally accepted valuation techniques, including estimated discounted cash flows.

Financial assets are de-recognised when the rights to receive future cash flows have expired or are transferred and the Agency has transferred substantially all the risks and rewards of ownership. Financial liabilities are de-recognised when the obligation is discharged, cancelled or expires.

1.6 Hedge accounting under IFRS 9 Financial Instruments

Derivative financial instruments comprise forward contracts held to hedge the Agency's exposure to foreign currency risk. They are designated as cash flow hedges. The effective portion of change in the fair value is recognised in equity. The gain or loss relating to the ineffective portion is recognised immediately in the Statement of Comprehensive Net Expenditure. Amounts accumulated in equity are recycled to the Statement of Comprehensive Net Expenditure in the periods when the hedged item affects the Statement of Comprehensive Net Expenditure.

Financial instruments held to hedge foreign currency risk exposures are designated as cash flow hedges if the criteria for applying cash flow hedge accounting under IFRS 9 are met. If the criteria are not met, such as when a forecast transaction is no longer expected to occur, the forward contract is accounted for as a financial instrument held for trading purposes and any cumulative gain or loss that was reported in taxpayer's equity is immediately transferred to the Statement of Comprehensive Net Expenditure.

1.6.1 Financial assets

In accordance with IFRS 9 Financial Instruments, the Agency classifies financial assets into the following categories:

- Amortised cost
- Fair value through other comprehensive income (FVOCI); and
- Fair value through profit or loss (FVTPL).

The classification of financial assets is based on the business model in which a financial asset is managed and its contractual cash flow characteristics.

IFRS 9 introduced some key changes to impairment of financial assets. The new impairment model is forward looking and is based on expected credit loss (ECL) model which applies to the following financial assets:

- Financial assets measured at amortised cost;
- Trade receivables, contract assets and lease receivables;
- FVOCI loans; and
- Financial quarantees.

1.6.2 Financial liabilities

In accordance with IFRS 9 Financial Instruments, the Agency classifies financial liabilities as either:

- Amortised cost, or
- Fair value through profit or loss (FVTPL).

Financial liabilities are measured at amortised cost unless either:

- The financial liability is held for trading (i.e. it is held with principal purpose of selling or repurchasing it in the near term), therefore it must be measured at FVTPL; or
- The Agency elects to measure the financial liability at FVTPL.

1.7 Operating income

Operating income is income that relates directly to the operating activities of the Agency and is measured at the fair value of consideration received or receivable and is shown net of trade discounts; value added tax and other taxes. It comprises, principally, statutory licence fees for activities covered by the Outer Space Act 1986; co-funding income from other public sector bodies; grant funding from the EU; and charges for services provided, on a full cost basis, to external customers. Operating income is recorded in accordance with IFRS 15.

1.8 Grants payable and receivable

Grants payable are recognised in the period in which the grant recipient carries out the activity that creates an entitlement to grant. Recognition of entitlement varies according to the details of individual schemes and the terms of the offers made. Unpaid and unclaimed grants are charged to the Statement of Comprehensive Net Expenditure on the basis of estimates of claims not received and are included in accruals in the Statement of Financial Position.

1.9 Ownership of equipment purchased by research grant

Equipment that has been purchased by an Institution with research grant funds supplied by the Agency belongs to that Institution. Through the Conditions of Grant applied to funded institutions, the Agency reserves the right to determine how such equipment shall be disposed of and how any disposal proceeds are to be utilised. Such equipment is excluded from these financial statements.

1.10 Insurance

As an Executive Agency of BEIS, the Agency, along with other public bodies of the Departmental group, do not generally insure. Insurance will only be obtained on items which, with the agreement of the Department, require it due to the risks involved. Insurance premiums are charged to the Statement of Comprehensive Net Expenditure. Staff travelling overseas on business are covered by the Department's insurance policy for any medical costs incurred abroad, but are expected to take out their own travel insurance policy to cover any loss or damage to personal property. Claims directly related to business property are considered under BEIS expenses policy guidelines.

1.11 Foreign exchange

Transactions that are denominated in a foreign currency are translated into pound sterling at the rate of exchange prevailing on the date of each transaction unless covered by a forward exchange contract. Monetary assets and liabilities denominated in foreign currencies at the Statement of Financial Position date are translated at the rates of exchange ruling at that date. These translation differences are recognised in the Statement of Comprehensive Net Expenditure.

1.12 Pensions

The Agency's staff are covered by the provisions of the Principal Civil Service Pension Scheme (PCSPS) and Civil Servants And Others Pension Scheme (CSOPS) as described in the Remuneration and Staff Report. Defined benefit schemes are unfunded. The Agency recognises the expected cost of these elements on a systematic and rational basis over the period during which it benefits from employees' services by payment to the PCSPS and CSOPS of amounts calculated on an accruing basis. Liability for payment of future benefits is a charge on the PCSPS/CSOPS. In respect of the defined contribution elements of the Schemes, the Agency recognises the contributions payable for the year.

Contributions to the defined benefit pension scheme are charged to the Statement of Comprehensive Net Expenditure in accordance with actuarial recommendations so as to spread the cost of the pensions over the employee's expected working lives. Further details of the pension schemes can be found on the Civil Service Pensions website at www.civilservicepensionscheme.org.uk

1.13 Employee benefits

In accordance with IAS 19 Employee Benefits, the Agency is required to recognise short-term employee benefits when an employee has rendered service in exchange for those benefits. Included in the financial statements is an accrual for the outstanding employee holiday entitlement at 31 March 2019 on an undiscounted basis.

1.14 Taxation

The Agency, as an Executive Agency of BEIS, is exempt from income and corporation tax by way of its Crown exemption.

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

- 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.

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

1.15 Operating leases

Leases in which significant portion of the risks and rewards of ownership are retained by the lessor are classified as operating leases.

Operating lease rentals are charged to the Statement of Comprehensive Net Expenditure on a straight-line basis over the lease term, in accordance with IAS 17 Leases. The amounts payable in the future, under these operating lease arrangements are not discounted.

Operating lease income is recognised in income on a straight line, undiscounted basis over the lease term.

1.16 Contingent liabilities

The Agency discloses contingent liabilities in accordance with IAS 37 Provisions, Contingent Liabilities and Contingent Assets. In the event that a contingent liability crystallises, it is expected that the parent department, BEIS, will fund this liability.

1.17 Reporting by operating segment

Under HM Treasury guidance in the FReM, the Agency is expected to meet the requirements of IFRS 8 Operating Segments to report information concerning operating segments where the criteria under IFRS 8 are met.

Although the Agency considers that its activities contribute to an overall mission within the same business environment, nevertheless there are separable operating segments on a geographical basis, namely National and International. See note 2 for further details.

1.18 Estimation techniques used and key judgements

The preparation of the Agency's financial statements requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities, income and expenditure. The estimates and associated assumptions are based on historical experience and other factors, including expectations or future events that are believed to be reasonable under the circumstances, the results of which form the basis for making judgements about carrying values of assets and liabilities that are not readily apparent from other sources. Uncertainty about these assumptions and estimates could result in outcomes that require an adjustment to the carrying value of the asset or liability. Where applicable these uncertainties are disclosed in the notes to the financial statements.

In accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates and Accounting Policies, revisions to accounting estimates are recognised in the period in which the estimate is revised, if the revision affects only that period, or in the period of the revision and future periods, if the revision affects both current and future periods.

The estimates and assumptions that have a risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are fluctuations in the fair value of financial assets/liabilities measured using forward market exchange rates (see Note 7 for further information).

1.19 Changes to International Financial Reporting Standards (IFRS) and 2017-18 Financial Reporting Manual (FReM)

1.19.1. Changes to IFRS

In accordance with the FReM, these financial statements apply EU adopted IFRS and Interpretations in place as at 1 January 2019. The following new standards will be adopted by the Agency in full, when they are applied in the FReM, unless the requirements are interpreted or adapted by the FReM:

- IFRS 16 Leases, will replace IAS 17 Leases and related IFRIC and SIC Interpretations. IFRS 16 was published by IASB in January 2016 with the aim of improving the financial reporting of leases. The Standard will be effective for accounting periods beginning on or after 1 January 2019 and will be applied in the FReM from 1 April 2020 (with a limited option for early adoption from 1 April 2019 which is not applicable to the Agency). This Standard will have an impact on the financial statements of the Agency but it is not expected to be material.
- IFRS 17 Insurance Contracts, will replace IFRS
 4 Insurance Contracts. IFRS 17 will be effective
 for accounting periods beginning on or after
 1 January 2021. As the Agency does not provide
 any insurance contracts in the normal course of
 business, this Standard is not expected to have an
 impact on the financial statements of the Agency.

1.19.2. Changes to the FReM

The following two IFRSs were first time adopted in the 2018-19 FReM:

- IFRS 9 Financial Instruments replaced IAS 39 Financial Instruments: Recognition and Measurement. The Standard was applied in full in the financial statements of the Agency in accordance with the 2018-19 FReM and its interpretations for public sector. The adoption of IFRS 9 has not had a material impact on these financial statements.
- IFRS 15 Revenue from Contracts with Customers replaced IAS 11 Construction Contracts and IAS 18
 Revenue and related IFRIC and SIC Interpretations.
 The Standard introduced a new five stage mode for the recognition of revenue from contracts with customers to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled to in exchange for those goods or services. The changes introduced in this Standard have not had any effect on the financial statements of the Agency.

2. Statement of operating costs by operating segment

The Agency has two main geographical segments namely, international and national, and it is on this basis that reportable segments have been identified.

Funding is received by the Agency from BEIS to cover the cost of international subscriptions to the European Space Agency and the remainder of its programme work at a national level. National programme work includes being responsible for delivering aspects of specific project work in the UK as well as funding universities and companies to undertake various research and development activities.

The activities within the two segments are reported to the Executive Board on a monthly basis using a management accounts format which analyses on an administration and programme basis and is compared against funding allocation. This is further analysed at directorate level enabling full financial control to be maintained.

The segments are separate for decision making purposes and there are no transactions between the two segments.

There have been no changes in segmental identification since the previous reporting period. Statement of Financial Position analysis by segment is not reported to the Executive Board and, therefore, in accordance with IFRS 8 Operating Segments, is not disclosed in the financial statements.

		2018-19			2017-18	
	National segment	International segment	Total	National segment	International segment	Total
	£000	£000	£000	£000	£000	£000
Gross expenditure	123,473	256,363	379,836	101,111	298,536	399,647
Income	(306)	(4,211)	(4,517)	(178)	(1,693)	(1,871)
Net operating costs	123,167	252,152	375,319	100,933	296,843	397,776

Description of segments

The national segment mainly consists of expenditure on work undertaken within the UK either by the means of funding to research institutions or companies or expenditure on major national programmes.

The international segment mainly consists of expenditure with the European Space Agency in the

form of subscriptions which are used to fund, along with subscriptions from other national governments, its various space programmes.

Central administrative and operational costs are reported under the national segment reflecting the way they are reported to the Executive Board.

2010 10

2017 10

3. Staff Costs

2018-19	2017-18
£000	£000
7,695	5,336
868	582
1,627	1,093
10,190	7,011
260	113
(65)	(117)
10,385	7,007
	£000 7,695 868 1,627 10,190 260 (65)

Further analysis of staff costs, average number of persons employed and other relevant disclosures can be found in the Remuneration and Staff Report.

4. Total expenditure

	Note	2018-19	2017-18
		£000	£000
International subscriptions			
European Space Agency (ESA)	i	282,070	329,327
Recognised (gain)/loss on forward exchange contracts		(29,076)	(36,509)
Net (gain)/loss on foreign exchange spot rate (non-hedge)		(584)	226
Total ESA subscriptions		252,410	293,044
Other international subscriptions		32	-
Other international grants & payments			
French Space Agreement (CNES) bilateral agreements		2,709	4,522
ESA mandatory tax adjustment and other payments	ii	1,212	970
20 A managiory tox adjustment and other payments		225	-
National grants and other funding			
International Partnership Programme		26,624	29,720
Academic grants	iii	24,625	22,667
SABRE		16,262	11,544
Satellite Launch Programme		6,276	11,544
Spectrum charges		4,017	4,017
National Space Technology Programme		3,458	5,261
CEOI 2020		1,970	4,921
Other national programme grants and funding		6,268	4,755
Care national programme grants and randing		0,200	1,700
Total subscriptions, grants and other funding		346,088	381,421
Tooksical contracts and contract management		20,268	0 14.5
Technical contracts and contract management		20,200	8,165
Operational costs			
Payments for departmental shared services	iv	778	670
Travel and subsistence		646	644
Rentals under operating leases	V	554	462
Accommodation		253	319
Training and other staff costs		174	194
Auditors remuneration (external)		40	40
Other		636	725
Total operational costs		3,081	3,054
Total ovnes disus		240 / 27	202770
Total expenditure		369,437	392,640

Notes:

- i. The Agency pays an annual subscription to ESA in Euros. To manage our budgets effectively, the Agency entered into forward exchange contracts with the Bank of England to hedge about 87% of its total 2018-19 commitments to ESA. The total exposure at spot rate in 2018-19 would have been £282,070k.
- ii. The Agency is liable in accordance with Article 42 of the Coordinated Organisation's Pension Scheme Rules, for the amount of tax adjustment applicable to pensions borne by the Member State in which the recipient is subject to taxes on income. The 2018-19 tax liability of £1,212k (2017-18: £864k) relates to tax of the recipients in the United Kingdom for the European Space Agency.
- iii. Prior to the creation of the Agency the responsibility for provision of academic research grants was undertaken by the Science Technology and Facilities Council (STFC), now part of UK Research and Innovation (UKRI). Since 1 April 2011, such grants are the responsibility of the Agency. Due to the ongoing nature of some of the grants and the expertise that UKRI have in this area it has been agreed that UKRI would continue to maintain the process and make any necessary payments, recharging the Agency for the costs of such grants. The cost of maintaining and processing these payments is minimal and UKRI has agreed to undertake this activity on a nil cost basis. Therefore there is no charge for this activity to the Agency.
- iv. Payments for departmental shared services include the costs of centrally provided information technology, general overheads and legal advice. From 1 April 2017 legal services are provided by the Government Legal Department via an SLA with BEIS. The overall charge for legal advice costs in 2018-19 was £272k (2017-18: £340k).
- v. The Agency entered into two operating lease agreements for office accommodation. See Note 12 Operating Leases for more information.

5. Income from operating activities

	Note	2018-19	2017-18
		£000	£000
EU SST Programme		3,915	1,411
Outer Space Act 1986 licence fees		306	143
European GNSS Agency rental income	12.2	296	282
Other Income		-	35
Total		4,517	1,871

6. Other financial assets/liabilities

The Agency has a number of derivative contracts that have been designated as cashflow hedges to better plan currency fluctuations in relation to its international subscriptions payable to the European Space Agency in Euros. These contracts are revalued at each year end based on the future forward market rates, as provided by the Bank of England, at that time. Any such revaluations at the year end therefore reflect unrealised gains and losses at that time.

The Agency uses forward exchange contracts as part of a balanced portfolio of hedges designed to control foreign currency risk in line with the level of risk appetite adopted by the Executive Board. The Agency is fully compliant with the BEIS departmental hedging policy, which forbids using financial instruments for speculative purposes. Hedging contracts may be placed with the Bank of England where the expected cost at the current exchange rate represents at least 2% of the total budget or the value of the transaction is greater than £2m. The only form of hedging foreign currency risk allowed within the BEIS family of partner organisations is the use of forward contracts so as to provide greater budget certainty and therefore plan the future expenditure more effectively.

	Note	2018-19	2017-18
		£000	£000
Balance at 01 April 2018		77,284	83,881
Disposals (contracts settled in year)	i	(29,076)	(36,509)
Revaluation movement	ii	(27,353)	29,912
Balance at 31 March 2019		20,855	77,284
Non-current other financial assets		6,953	46,774
Current financial assets		16,978	30,510
Total other financial assets		23,931	77,284
Non-current other financial liabilities		(2,125)	-
Current financial liabilities		(951)	-
Total other financial liabilities		(3,076)	-
Total net other financial assets and liabilities		20,855	77,284
Net change in value of cash flow hedges impacting reserves	iii	(56,429)	6,597

Notes:

- i. The disposal value arose through the completion of six forward exchange contracts with settlement dates falling in the reporting period. This notional value represents the total cumulative unrealised (gain)/loss for each of these contracts previously recognised in the revaluation reserve and removed on completion.
- ii. Revaluation movement represents the difference in the fair value of the contracts still in place at 31 March 2019 and 31 March 2018. These contracts are for subscriptions payable up to 1 October 2021. The GBP to EUR forward rate moved on average from 1.11 to 1.14 during the year.
- iii. Further information on the reported change in the value of cash flow hedges can be found in the Statement of Changes in Taxpayers' Equity on page 79 under the Revaluation Reserve disclosures.

Cashflow hedge contracts

The hedge contract is designed to allow for cash flow planning and enables better budgeting to align with the comprehensive spending reviews which are normally undertaken by the government every three years. The hedge contract is not designed to protect against currency risk which will result in an unrealised gain or loss arising each year end when hedges are revalued. On completion of the contract there will be either an opportunity gained or lost resulting from the movement in the exchange rate. As this is outside management control, and in line with the HM Treasury's Consolidated Budgeting Guidance 2018-19, these gains and losses are only recognised under the resource annually managed expenditure (RAME) budgetary category.

During the reporting period the Agency maintained in total a hedge portfolio of 19 forward exchange contracts, six of which matured during the year. The outstanding 13 contracts will reach settlement between 3 June 2019 and 1 October 2021. The total cost of these contracts was £681,611,210 and as at

31 March 2019 fair value of all forward contracts held by the Agency was £702,465,749. There has been a positive movement on the revaluation reserve as at 31 March 2019 of £20,854,539.

The fair value of forward exchange contracts is determined by comparing the contractually agreed cost on creation of the contract with the fair value of the contract translated at the future forward market rate provided by the Bank of England at close of trading on 29 March 2019 for the relevant forward exchange contracts settlement dates. These are indicative rates only, and therefore in accordance with IFRS 13 Fair Value Measurements, the valuation inputs are classified as Level 2.

Credit risk

Credit risk is the risk that one party to a financial instrument will cause a financial loss for the other party by failing to discharge an obligation. The Agency does not issue any loans, apart from staff loans, and does not have any outstanding loans. Any staff loans in issue are not material and do not present any credit risk to the organisation.

Liquidity risk

Liquidity risk is the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities. In common with other government agencies, the future financing of its liabilities is to be met by future funding from the parent department, namely the Department for Business, Energy and Industrial Strategy, which receives its funding by means of Supply, voted annually by Parliament. There is no reason to believe that future approvals will not be forthcoming, therefore, on this basis the Agency is not exposed to liquidity risks.

Market risk

Foreign currency risk

The Agency's exposure to foreign currency risk during the year was significant, though this was considerably mitigated by the use of cashflow hedge contracts. The expenditure on international subscriptions to the European Space Agency, in Euros, was made in three instalments during the year. The Agency aims to manage a portfolio of forward contracts to purchase Euros at approximately 80% of the annual

subscription payable to ESA during a calendar year thereby fixing the exchange rate to be used. Depending on the movement of exchange rates and risk appetite, this percentage (coverage) can fluctuate by 10%. The remaining 10-30% is translated at the prevailing spot rate.

The Agency has also limited transactional currency exposure arising from occasional payments made in currencies other than sterling and through reimbursing foreign travel and subsistence costs for staff travelling to international bodies. Such transactions are translated at the prevailing spot rate and the amounts involved are not material.

Interest rate risk

The Agency does not invest or access funds from commercial sources. The Agency does not have any loans or contracts that are subject to interest rate fluctuation and is not subject to any interest rate risk.

The Agency does not participate in any market reliant activities and is not subject to market risk.

7. Trade receivables and other current assets

	31 March 2019	31 March 2018
Trade and other receivables less than one year	£000	£000
Trade receivables	132	186
Other receivables	253	46
Prepayments & accrued income	47,503	35,411
VAT	274	316
Total	48,162	35,959

Note:

i. Prepayments and accrued income include a prepayment made to the European Space Agency of £46,139k (2017-18: £35,296k).

8. Cash and cash equivalents

	Note	2018-19	2017-18
		£000	£000
Cash and cash equivalents			
Balance at 1 April		12,915	29,107
Net change in cash and cash equivalents		(1,893)	(16,192)
Balance at 31 March		11,022	12,915
The following balances at 31 March were held at:			
Government Banking Service	i	11,022	12,915

Note:

i. Included in the cash balance is £473,377 (2017-18: £473,377) held on behalf of the Ministry of Defence, who are third party beneficiaries in the EU SST programme. This funding was received from EU.

9. Trade payables and other current liabilities

	Note	31 March 2019	31 March 2018
		£000	£000
Trade and other payables less than one year			
Trade payables		748	3,111
Other payables		453	364
Accruals and deferred income	i	40,084	30,735
Total		41,285	34,210

Note:

i. Accruals include accrued expenditure in respect of SABRE of £7,456k (2017-18: £3,447k); GNSS of £6,067k (2017-18: £228k); Spaceflight Programme of £5,012k (2017-18: £296k); National Programme (via UKRI) of £4,568k (2017-18: £1,529k); IPP of £2,632k (2017-18: £7,255k); ESA of £1,792k (2017-18: £47k); NSTP of £1,311k (2017-18: £1,215k) and Microcarb of £1,069m (2017-18: £2,270k).

10. Capital commitments

There were no capital commitments as at 31 March 2019 (2017-18: None).

11. Other financial commitments

11.1 International subscription commitments

The Agency has entered into non-cancellable forward contracts (which are not leases or PFI contracts), in connection with a financial instrument for hedging international subscription payments. The payments to which the Agency is committed, analysed by the period during which the commitment expires, are given below:

	31 March 2019	31 March 2018
ESA	000£	£000
Not later than one year	266,961	244,394
Later than one year and not later that five years	414,650	681,611
Total	681,611	926,005

11.2 Grants commitments

	31 March 2019	31 March 2018
	£000	£000
Not later than one year		
Academic Grant Commitments	16,909	14,585
SABRE	13,383	18,111
International Partnership Programme	28,075	30,921
Spaceflight programme	16,391	-
Later than one year and not later than five years		
Academic Grant Commitments	15,765	19,343
SABRE	4,717	9,834
International Partnership Programme	22,077	35,982
Spaceflight programme	9,279	-
Total	126,596	128,776

12. Operating leases

12.1 Obligations under operating leases

Total future minimum lease payments under non-cancellable operating leases are given below:

Total	6,982	6,673
Later than five years	4,274	4,234
Later than one year and not later than five years	2,165	1,953
Not later than one year	543	486
Offices	£000	£000
	31 March 2019	31 March 2018

Notes:

In 2013-14, the Agency entered into a lease agreement with NATS (En Route) Plc for office accommodation at the NATS Swanwick Control Centre. The lease commenced on 7 January 2014 and will expire on 31 December 2030. There is no security of tenure after this date. The agreed initial rent charge is £83,745 per annum, which will be reviewed every five years and linked to the Retail Price Index (RPI). The base occupier's and tenant's charges were initially set at £359,609 per annum, and the landlord has the right to review these charges annually in line with the movements in RPI. In 2018-19, the total lease payments charged to the Statement of Comprehensive Net Expenditure were £480,339 (2017-18: £452,427). £41,690 remained outstanding as at 31 March 2019.

In October 2023, the Agency is able to exercise an early lease surrender option in line with the break clause in the lease agreement. The total future minimum lease payments on an undiscounted basis up to that point would amount to £2,244,606.

In April 2018 the Agency entered into a short-term lease agreements with Satellite Applications Catapult Limited for office accommodation at the Electron Building based within the Harwell Oxford campus for a lease term up to 30 March 2020 at the cost of £29,933 per annum. The lease payments were charged to the Statement of Comprehensive Net Expenditure and fully paid by 31 March 2019.

12.2 Operating leases granted

Total future minimum sublease income under non-cancellable operating subleases is given below:

	31 March 2019	31 March 2018
Offices	£000	£000
Not later than one year	315	284
Later than one year and not later than five years	1,363	1,209
Later than five years	2,714	2,714
Total	4,392	4,207

Notes:

In 2013-14 Agency granted an operating sublease to the European GNSS Agency (GSA). The lease is for an agreed amount for a period of 16 years from 7 January 2014. The lease covers office accommodation rented from NATS (EN ROUTE) Plc. In line with the superior lease with NATS, GSA have no security of tenure after the lease expires on 31 December 2030. The initial agreed rental charge was £275,207 per annum, which is reviewed annually in line with the movements in RPI. In 2018-19, the total lease income charged to the Statement of Comprehensive Net Expenditure was £296,346 (2017-18: £282,150). £84,733 remained outstanding as at 31 March 2019.

On 24 January 2018, the European Commission adopted a decision to transfer the back-up site of the Galileo Security Monitoring Centre, operated by GSA, from the NATS Swanwick Control Centre to Spain. The lease has not been formally terminated in accordance with the early surrender clause in the lease agreement, therefore the Agency recognised the full value of future minimum sublease income in the above table. Should GSA exercise the early surrender break permitted in the lease agreement in January 2024, the future undiscounted value of sublease income would amount to £1,558,252.

13. Head office accommodation

The Agency operates out of the Polaris House Campus in Swindon, which is owned by UK Research and Innovation (UKRI) on a joint tenancy agreement. All relevant costs are charged and recorded against operating costs as incurred. There are no capital commitments.

14. Contingent liabilities disclosed under IAS 37

In 2013-14, the Agency entered into an operating lease with NATS (En Route) Plc for office accommodation for the Galileo Security Monitoring Centre (GSMC). At the end of the lease term in December 2030 or in the event of an early surrender of the lease the Landlord has the contractual right to enforce the Agency to pay for costs of dilapidations estimated at £770,000 as at 31 March 2019.

Following the EU's decision to relocate the GSMC centre from the UK, the Agency is able to exercise an early lease surrender option in October 2023 in line with the break clause in the lease agreement. The Agency will be looking to recover any dilapidations costs from the existing tenant incurred as part of the early surrender settlement. The likelihood of outflow of economic benefit is therefore considered as not probable.

15. Related party transactions

During 2018-19, the Agency was an Executive Agency of the Department for Business, Energy and Industrial Strategy and BEIS was regarded as a related party with which the Agency had various material transactions. In addition, the back-office function for processing national grants was outsourced to UK Resarch and Innovation (UKRI), formerly the Science and Technology Facilities Council, which was also recognised as a related party. UKRI are an entity for which BEIS is regarded as the parent Department.

Employee benefits received by Agency's key management personnel are disclosed in the Remuneration and Staff Report on page 57. In addition, the Agency made the following aggregated payments to third parties where Agency's directors and non-executive members are also senior members of staff:

			Value of transactions
Name	Position with related party	Description of transactions	£000
Paul Hadley	Board Member (BEIS appointee) at the National Physical Laboratory	Programme expenditure	377
Malcolm Macdonald	Chair of Space Technology at the University of Strathclyde	Programme expenditure	230
Catherine Mealing-Jones	Lay Member of the University of Bath Council	Programme expenditure	100
David Southwood	Trustee for the National Space Centre	Programme expenditure	35
	Honorary Professor at the Lancaster University	Programme expenditure	9

16. Events after the reporting period

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

The date the accounts were authorised for issue is interpreted as the date of the Certificate and Report of the Comptroller and Auditor General.

GLOSSARY

AME	Annually Managed Expenditure	HSE	Health and Safety Executive
ARTES	Advanced Research in Telecommunications Systems Programme	ICAI	International Commission on Aid Impact
ASLC	Accruing Superannuation Liability Charges	IPP	International Partnership Programme
ВСМ	Business Continuity Management	ISS	International Space Station
BEIS	Department for Business, Energy and Industrial Strategy	JWST	James Webb Space Telescope
CAA	Civil Aviation Authority	KPI	Key Performance Indicator
CETV	Cash Equivalent Transfer Values	MoU	Memorandum of Understanding
CSOPS	Civil Service and Others Pension Scheme	NAO	National Audit Office
DAASICS	Director's Annual Assurance Statements of Internal Control	NASA	National Aeronautical and Space Administration
DEL	Departmental Expenditure Limits	NGO	Non-government Organisation
DSTL	Defence, Science and Technology Laboratory	NSTP	National Space Technology Programme
ECSAT	European Centre for Satellite Applications and Telecommunications	ODA	Official Development Assistance
EEI	Employee Engagement Index	OSS	Oxford Space Systems
ESA	European Space Agency	PCSPS	Principal Civil Service Pension Scheme
FCO	Foreign & Commonwealth Office	SABRE	Synergistic Air-breathing Rocket Engine
FTE	Full-time equivalent	SAR	Synthetic Aperture Radar
GAD	Government Actuary's Department	SCS	Senior Civil Service
GCRF	Global Challenges Research Fund	SIRO	Security, Information and Risk Officer
GIAA	Government Internal Audit Agency	SLA	Service Level Agreement
GIS	Government Interview Scheme	SME	Small and Medium-sized Enterprise
GLD	Government Legal Department	SoXSA	Scottish Centre of Excellence in Satellite Applications
GSTP	General Support Technology Programme	SPIN	Space Placements in Industry
HEO	Higher Executive Officer	SSC	Space Sector Council
HMG	Her Majesty's Government	SSGP	Space for Smarter Government Programme
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