



UK Space Agency
Annual Report and Accounts
2015/16

UK Space Agency Annual Report and Accounts 2015/2016

Presented to the House of Commons pursuant to section 7 of the Government Resources and Accounts Act 2000.

Ordered by the House of Commons to be printed on 7 July 2016.



© Crown copyright 2016

This publication is licensed under the terms of the Open Government Licence v3.0 except where otherwise stated. To view this licence, visit nationalarchives.gov.uk/doc/open-government-licence/version/3 or write to the Information Policy Team, The National Archives, Kew, London TW9 4DU, or email: psi@nationalarchives.gsi.gov.uk.

Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

This publication is available at www.gov.uk/government/publications

Any enquiries regarding this publication should be sent to us at UK Space Agency, info@ukspaceagency.bis.gsi.gov.uk

Print ISBN 9781474134293

Web ISBN 9781474134309

ID 10061602 07/16

Printed on paper containing 75% recycled fibre content minimum

Contents

Chief Executive's introduction	5
Highlights	7
<i>Section 1: Performance Report</i>	<i>9</i>
About the UK Space Agency	9
Performance	11
Collaboration	16
Policy	18
Our work	22
<i>Section 2: Accountability Report</i>	<i>35</i>
Directors report	35
Statement of Accounting Officer's responsibilities	35
Governance statement	36
Remuneration and Staff Report	47
Parliamentary Accountability Report	57
The certificate and report of the comptroller and auditor general to the house of commons	58
<i>Section 3: Accounts</i>	<i>61</i>
Financial statements	61
Notes to the financial statements for the year ended 31 March 2016	65

Chief Executive's introduction

2015/16 has been another successful year of progress in the UK space sector. I am pleased to introduce the 2015/16 Annual Report and Accounts which describes the key highlights of the UK Space Agency's contribution.

This year we saw the UK's first European Space Agency (ESA) astronaut, Tim Peake, begin his Principia mission to the International Space Station. He successfully launched on 15 December 2015 on his six month mission to use the unique environment of space for science and technology research. Principia has also been a wonderful opportunity to showcase the everyday benefits of space technology, the UK industry that creates it and the important science and innovation that it enables.

To this end we have worked with partners across the UK to promote Tim's mission on TV, radio and social media with great success. Our education team has done a fantastic job of using Principia to inspire young people and promote the uptake of STEM subjects via 27 school and university projects.

Published by ministers in December 2015, the new National Space Policy (NSP) captures, for the first time, the breadth of UK space policy in a single document. The NSP sets out the roles and responsibilities across Whitehall and industry while defining the enduring principles of UK space policy. It also introduces government's ambition to establish a spaceport in the UK to enable commercial spaceflight and small satellite launch.

Later in 2016 we will be publishing a refreshed Civil Space Strategy that will respond to the National Space Policy in setting government priorities for action over the next few years. Our vision of enabling year on year growth of the UK space economy rests on our commitment to work in partnership with industry, government, academia and international partners.

The Space for Smarter Government Programme (SSGP), now into its third year, exemplifies this. This initiative works across government to accelerate the use of satellite applications and data in the public sector. Working with the Satellite Applications Catapult, innovative solutions are being demonstrated in areas such as natural hazard risk management and environmental monitoring. Projects have involved other agencies, local government and the devolved administrations.



Katherine Courtney

Meanwhile, the International Partnerships in Space Programme (IPSP), has come to the end of its £32million, two year pilot phase. Twenty diverse projects have seen UK businesses tackling real world problems such as delivering education and health advice via satellite and working with countries in South America, Africa and the Far East. We are pleased to confirm that a new multi-year International Partnerships Programme (IPP) will be implemented.

In Earth Observation (EO) we have made great progress with the implementation of the EO strategy. We have committed new funding to the next generation of the vital Jason sea level monitoring programme. We are continuing our partnership with CNES on the innovative SWOT (Surface Water and Ocean Topography) mission as well as UK involvement in the next generation of the vital IASI (Infrared Atmospheric Sounding Interferometer) weather monitoring instrument. Similarly, investments in satellite telecommunications R&D and applications work through the European Space Agency (ESA) have enabled multiple wins by our industry in the global market place as well as a new public-private partnership with Paris-based Eutelsat on their 'Quantum' flexible small telecom satellite.

Our space science programme has gone from strength to strength; this year has seen the billion-star astrometry mission Gaia complete coverage of the whole sky and the first data catalogue is planned for release in mid-2016. The UK-led MIXS instrument for Europe's first mission to Mercury, BepiColombo, was delivered to ESA in May 2015. Led by Leicester University, MIXS will map the elemental composition of the planet's surface.

LISA Pathfinder, launched in November 2015, relies on key contributions from UK universities to help prove the feasibility of a future space-based gravitational wave observatory. This mission has become even more relevant following the recent confirmation of the first terrestrial measurement of gravitational waves.

The Comprehensive Spending Review (CSR), announced in late 2015 saw the government commit to maintaining real-term support for science and research throughout the current Parliament. Within this, the allocations for the UK Space Agency were announced in March 2016. This very positive outcome for the Agency will allow us to maintain our suite of national programmes and commitments to ESA.

For example, the National Space Technology Programme will continue to support early phase R&D, new national propulsion test facilities as well as Earth observation instrumentation. Exciting Flagship projects will include the SABRE air-breathing rocket engine and instrumentation for the Plato mission which will search for other Earth-like worlds orbiting distant stars.

We will continue to play our part in driving efficiency improvements in line with BIS aspirations and to work in partnership with Research Councils and Innovate UK.

I would like to pay tribute to my predecessor Dr David Parker who has been a tremendous ambassador for the UK space sector and as I take on the responsibility of Chief Executive of the UK Space Agency I look forward to continuing his good work and to working with our new Chair David Southwood.



Katherine Courtney

Interim Chief Executive and Accounting Officer

27 June 2016



David Parker

As of 1 April 2016 I have taken up a new role as Director of Human Spaceflight and Robotic Exploration with ESA. Over the past three years, I have been privileged to lead the UK Space Agency through a time of change in which we have made important steps forward in UK space policy. I am delighted that Katherine Courtney, former Director of the Enterprise Directorate at BIS, has been appointed as interim CEO until the end of 2016, allowing a permanent replacement to be appointed in due course. I know that Katherine will do an excellent job.

Rob Douglas recently came to the end of his tenure as the first Chair of our Steering Board. I would like to thank him for his sage advice and active support to the Executive Board team and myself.

Finally, I must pay tribute to the wonderful staff of the Agency, our sponsorship team in BIS, our entire Steering Board as well as our many partners in the UK and beyond. Their dedication, creativity and enthusiasm defines the success of the Agency. It is to them that I owe a personal and lasting debt of gratitude.

Dr David Parker, Chief Executive January 2013 – March 2016

National Space Policy

The UK's first National Space Policy was published in December 2015. Working across the UK in partnership with the rapidly growing sector, this policy will ensure the UK seizes opportunities to deliver new business opportunities, create jobs and push the boundaries of our understanding of space.

Credit: Geospatial Insight Ltd

Principia

The launch of Tim Peake as the first British ESA astronaut to the International Space Station generated unprecedented levels of public interest in space. Principia has been, and continues to be, a great education opportunity to promote STEM subjects and grow the workforce for the space sector. Tim's mission is possible due to our investment in the European Programme for Life and Physical Sciences at CMin 12 and 14.

Credit: ESA

UK Space Conference

The UK Space Agency coordinated and participated in the UK Space Conference in Liverpool in July 2015. It was a highly successful event with over 1,000 attendees, five plenary sessions, 25 parallel sessions and an exhibition area featuring over 100 organisations.

Credit: UK Space Agency (Max Alexander)

EU space programme

The UK's involvement in key EU space programmes (Space Surveillance and Tracking, Galileo, EGNOS, Copernicus and Horizon 2020) has continued to increase this year. The Agency supports UK industry in competing for contracts and grants from these programmes as they are a valuable way to build new competencies in the UK space sector, grow companies and create jobs. In 2015/16 ESA launched Sentinel 2A and 3A as part of the Copernicus constellation, and two pairs of 'Full Operational Capability' Galileo satellites.

Credit: ESA



Comprehensive Spending Review

Allocations to the Agency from the recent CSR reflect the Government's continued commitment to supporting and sustaining UK space research and innovation.



European Centre for Space Applications and Telecommunications (ECSAT) UK opening

Named after the British first ESA Director General, Roy Gibson, ECSAT's new building, which is the first permanent ESA presence in the UK, will host over 100 posts specialising primarily in telecommunications and integrated applications.

Credit: ESA



Lisa Pathfinder

Lisa Pathfinder is an ESA science mission which launched successfully on 3 December 2015. This UK-led spacecraft will demonstrate the ground-breaking technology required to observe gravitational waves.

Credit: ESA



SABRE

In 15/16 the government grant was agreed with Reaction Engines Ltd. The total investment of £60 million will be used to take the SABRE project from early stage development through to Critical Design Key Point review, where the design of the demonstration engine will have been finalised.

Completion of the grant agreement has enabled the next stages of the SABRE project to begin, representing an important step in the development of the ground-breaking technology that will transform access to space.

Credit: UK Space Agency (Max Alexander)



Innovation and Growth Strategy update report

The Innovation and Growth Strategy (IGS) partnership between government and industry have published plans for the next phase of the programme to capture 10% of the global space market by 2030. The joint government, industry and academia IGS team is working together to identify opportunities and remove barriers to growth for the UK space sector.

Credit: UK Space Agency (Max Alexander)



Regional Growth

The UK Space Agency has continued to work closely with Devolved Administrations (DAs) and Local Enterprise Partnerships (LEPs) to help them realise the value that space may bring to their local economies. This year we have agreed to co-fund the Catapult's call for new Centres of Excellence which will form the nucleus of new space clusters.

Credit: ESA

About the UK Space Agency

The UK Space Agency is responsible for leading and growing the UK civil space sector, providing a clear, single voice for UK space ambitions.

Vision and mission

Our vision is to enable a UK space economy worth 10% of the global space market by 2030. We take a 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.

As an Executive Agency of the Department for Business, Innovation and Skills, the UK Space Agency is responsible for the civil space policy landscape, representing the UK at the international level on global space policy issues, and supporting it with regulatory and licensing regimes for UK space activities. Our role as a regulator supports the growth agenda in a proportionate and responsible way. The pace of technology, market demand and business models are changing fast and our regulatory regime must remain flexible to keep abreast of these changes.

We have a responsibility to nurture and encourage the growth of the UK space sector, from the industrial and academic partners to its highly-trained workforce and users from both the commercial and public sectors. We invest alongside business to de-risk new space technology and coordinate technology standards that keep UK business competitive. We invest in scientific projects that help us understand our changing planet, the physics of new materials and explore our solar system and the Universe beyond.

The UK space sector expects to create 100,000 new jobs by 2030 as the sector grows and satellite infrastructure extends to other areas. The Agency uses the UK space programme to educate and inspire the next generation of scientists and engineers, including those needed to sustain the industry. Our communications work sets out to increase the general public's understanding of space and its practical benefits.

Our business model supports the delivery of a growing UK space economy. As described in the 'Our Work' section we do this by working closely with a range of

stakeholders to understand the sector's business, policy and technical needs. We apply our expertise and wider links to deliver effective solutions through a programme management approach.

A small and agile organisation, we are organised into four directorates: Policy, Growth, Programmes, and Operations and Resources. Together, we bring a wide range of skills and knowledge to bear on our work.

The year ahead

Looking forward to the next year (2016/17) we will be concentrating on five Key Performance Indicators (KPIs) which are detailed in the [16/17 Corporate Plan](#):

- **Set out the priorities for the UK space sector addressing the need for continued economic growth, increased exports and industrial sustainability** - The 2016-2020 Civil Space Strategy will translate the National Space Policy into a plan of action for the civil space sector within the five year time frame.
- **Run a National Spaceflight Programme to deliver a stepwise approach to establishing a commercial small satellite launch capability in the UK as set out in the National Space Policy. Initial capability will build on the operation of sub-orbital science spaceflights from a UK spaceport** – It is a Governmental ambition for the UK to become the European hub for commercial spaceflight. We will start with sub-orbital operations which are a crucial stepping stone to establishing launch capability for small satellites from the UK.
- **Set out and achieve the UK programme priorities for investment at the European Space Agency's Council of Ministers in December 2016** – The 2016 European Space Agency Ministerial (CMin 16) will be the most significant ESA ministerial meeting of this spending review period and the key opportunity to make substantive decisions that reflect government and industry priorities.
- **Fund and monitor the progress of the development and delivery of the Agency's agreed national and international space programmes** – The Agency delivers a range of programmes and projects to benefit UK industry, academia and society, working at the local, national, European and global level.

- Through the Space for Smarter Government Programme (SSGP), facilitate the public sector in using satellite enabled services for smarter, more efficient operations, in addition to stimulating economic growth – The SSGP enables the public sector to save money, innovate and make more effective policy decisions by using space technology and data.



Performance

Each quarter the UK Space Agency reports on performance to the Executive Board, Steering Board, Audit Committee and BIS sponsor team.

Performance is measured using our dashboard, risk register and Performance Indicator (PI) reports. These are updated at least quarterly and are scrutinised by our Boards. The Dashboard contains information on Key Performance Indicators (KPIs), risk, people and finance. See each corresponding section below.

Key Performance Indicators

In the 2015/16 Corporate Plan, we detailed five KPIs which were the priorities for the 15/16 financial year. The KPIs were supported by 63 PIs which represent the breadth of the Agency's work.

A summary of each KPI is shown in the table below with a Red/Amber/Green rating given at 31 March. A broader overview of the work carried out by the Agency over the past year is shown in the "[Our work](#)" section of the Annual Report.

KPI	Status	Summary
Achieve the best outcome for the UK Space Sector from the 2016 Spending Review	Green	<ul style="list-style-type: none"> The Agency's financial outcome from the CSR reflects the Government's continued commitment to supporting and sustaining UK space research and innovation. The CSR settlement enables us to enter the ESA Council of Ministers planning phase with the ability to enter negotiations with a funded plan.
Improve evidence on the value added of the UK Space Agency to the UK	Green	<ul style="list-style-type: none"> Stronger evidence on the value-added of the UK Space Agency helped to secure a broadly positive outcome for the Agency in the Comprehensive Spending Review. We published new research on the economic impact of the UK space industry (The Case for Space 2015) and on the returns from space funding (Returns from Public Space Investments). We formalised our approach to evaluating the impact of our programmes in the Agency's new Evaluation Strategy, which sets out several commitments such as a requirement for all new projects and programmes to have a clear and appropriate evaluation plan in place before being approved. This will provide a basis for future work on evaluation in 2016/17 and beyond. We detailed our approach to prioritising our funding in our Investment Principles, which set out how we collect and bring together evidence from diverse sources to ensure that our decisions are evidence-based. These principles will underpin work on the Civil Space Strategy in the 2016/17 financial year. Improving the evidence base is a long-term activity and will continue with our strengthened analytical capability within the Agency and the recruitment of a newly formed Economics team.
Implement the UK strategy for Earth Observation (EO) from Space	Green	<ul style="list-style-type: none"> The EO Strategic Implementation Plan was published in July 2015 with a Town Hall meeting in June. We have seen the successful launch of Sentinel 2a and 3a, cementing the Copernicus programme. There is a proactive national EO community helping inform UK engagement with both ESA and the European Commission. The UK won the \$227million Prime contract to build the ESA BIOMASS mission. We fully evaluated the EO instrument development programme CEOI and demonstrated that this has enabled the active, connected and informed UK community to leverage many contracts. It has also demonstrated that the UK is world leading in a number of technical areas. As a result of the Climate data from Space Group efforts, UK academia and industry won roles in all, with leadership of four, of the seven major climate services contracts tendered by the European Centre for Medium-range Weather Forecasts and are set to win more in future calls. Internationally the UK is participating in both the Group on Earth Observation (GEO) and the Committee of Earth Observation Satellites (CEOS). For further information see the "Earth Observation" section of this report.

Exploit the education and inspiration value of the UK 2015 astronaut mission to the ISS	Green	<ul style="list-style-type: none"> The Agency worked closely with ESA, media and education partners to best exploit such an exciting opportunity. Following a successful launch on 15 December there has been a noticeable upturn in public interest in Tim's Principia mission and in the education programme. Over 3,000 young people attended the launch event and it was watched by over 26.5 million viewers over the course of the day. The BBC Stargazing Live season, with the bonus addition of Tim performed a spacewalk on 15 January, really helped to further build the public and media interest. In 2015/16 the total figure of engagement on Principia education projects is over 800,000; with many projects still ongoing and unreported. For further information on the education programme see the "Education for Growth" section.
Efficient delivery at the local, national, European and global scale by collaborating with others	Green	<ul style="list-style-type: none"> The Agency's programmes are closely monitored against plans. Overall these programmes performed well during the financial year, delivering against their planned objectives. More details on the individual programmes can be found in the "Our Work" section.

Risk

The aim of our risk management approach is to systematically and proactively identify and treat risks which either threaten the Agency's success or result in opportunities being missed.

The UK Space Agency has established risk registers to manage our risks at corporate and directorate level. These registers set out the initial risk statement, the existing control mechanisms in place, the proposed mitigation strategies, and an assessment of the likelihood and impact of the risk occurring. These registers are reviewed and updated on a regular basis for the Executive Board, Audit Committee and Steering Board. Over the past year the Agency has continued to mature its approach to risk management; in particular by setting out a risk appetite statement, integrating corporate and directorate level risk registers and designing risk management training. This training will be delivered to key staff in early 16/17.

The Agency's risk appetite allows us to operate without exposing the Agency to unexpected risk or cost. The Executive Board support well managed risk, taking advantage of new opportunities and to use innovative approaches to help achieve Agency objectives.

Each of the Agency's risks fall within one of the HMG categories of risk:

Financial	Result in financial loss, poor value for money or breach regularity or propriety.
Operational	Have an adverse impact on strategic or operational performance.
Reputational	Have an adverse impact on the Agency's reputation.
Compliance	Lead to censure from internal or external audit or result in a breach of statutory legislation.
Information	A loss of information that results in a security breach (and downstream financial, reputational, operational impact).

The key corporate risks which the Agency scrutinised over the course of the year are summarised on the following page.

Performance continued

Risk title	Risk summary	Key outcomes
Spending review	Ensuring funding is available to meet Agency objectives.	We received our spending review allocations in March 2016. We received a satisfactory settlement and the risk was subsequently retired.
Principia	The opportunity presented by Principia must be fully exploited by the Agency.	With the strong increase in engagement from the general public on Principia and the related education programmes, this risk has steadily decreased over the course of the year. The opportunity to maximise the value of Principia will extend past Tim Peake's return to Earth and so this risk remains on our risk register.
UK SBS	This risk is about understanding and monitoring the impact on the Agency from any changes in service provision by our back office service provider.	Although the Oracle, HR, payroll and finance functions of UK SBS have all been assessed as green, there still remains a risk to the Agency of potentially inadequate service levels as UK SBS transitions to a new service delivery model post BIS 2020; hence this risk remains on our risk register.
Spaceflight	This risk records the programme risks of the current work towards orbital and non-orbital spaceflight.	The spaceflight programme is an ambitious and high risk venture; accordingly the programme has developed strong risk management controls which are used to closely monitor the emergent challenges.
CMin	This risk records the impact of the UK failing to achieve its programmatic aims at the 2016 ESA Council of Ministers in December.	This risk has recently been escalated to our corporate risk register; it will be reassessed throughout the course of CMin planning.

People

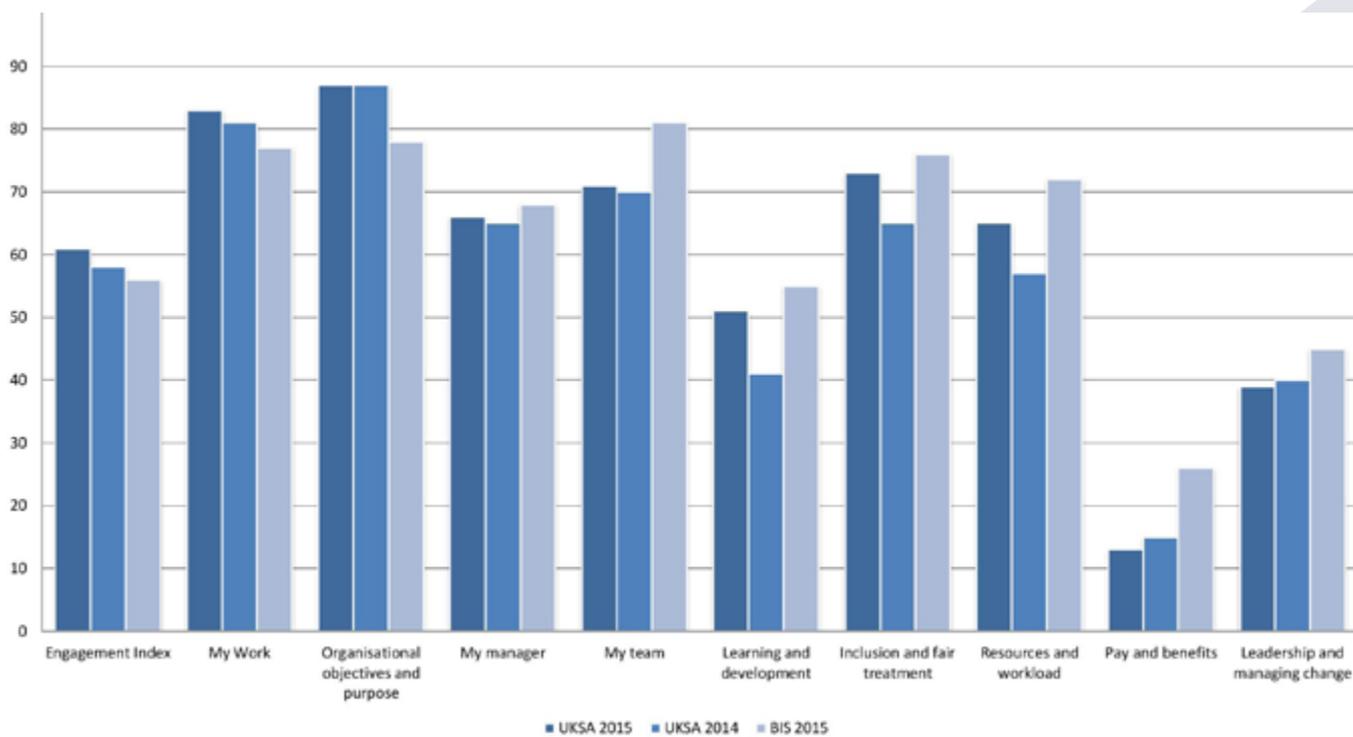
Our people are vital to the success of the Agency. Without the commitment, hard work and knowledge of our staff none of the work outlined in this Annual Report would have been possible.

We have continued to invest in our workforce through learning and development initiatives which include project and programme management upskilling. A further three managers have completed or commenced the 'Leading with Purpose' management programme, and there has been a focus on soft skills such as language training. A total of 140 days training has taken place (this figure is conservative as it does not include Civil Service mandatory training or informal training that has occurred during the year). Over the coming year, we will further build on our Learning and Development strategy through developing a new workforce plan to enable the Agency to respond to BIS 2020 challenges.

In this year's Civil Service Staff Survey, we obtained an employee engagement index (EEI) of 61%. The EEI is shaped by individuals experience at work as measured by the nine themes shown in the chart opposite. We are pleased with these results which continue to show a positive trend over the years (this year shows an improvement in eight out of the 10 categories compared to last year). The chart shows the results of 2015 compared to 2014 and also compared to the BIS 2015 average. The results of the staff survey were analysed and discussed across the organisation: in Directorate meetings to seek further insight into the results, and in several staff survey focus groups to develop an action plan to take forward. This year the 'leading with purpose' course has been attended by two staff and will be further encouraged in 2016/17 to target the 'leadership and managing change' theme.

For a more detailed view of our staff see the [Staff and Remuneration Report](#).

Staff survey results:



Finance

Overall financial performance:

	2015/16 Budget £000	2015/16 Outturn £000	Variance £000
Resource DEL-Admin	3,546	3,544	(2)
Resource DEL - Programme	206,000	201,531	(4,469)
Capital DEL - programme	152,400	144,018	(8,382)
Total DEL	361,946	349,092	(12,854)
Resource AME	756	802	46
Resource AME - forward contract revaluations	0	(45,683)	(45,683)
Total AME	756	(44,881)	(45,637)

The Agency's 2015/16 final Departmental Expenditure Limit (DEL) outturn (excluding Annually Managed Expenditure), was £12.9 million below formal allocation and within the outturn target agreed with the BIS sponsor team.

The underlying reasons for this underspend was the approach taken in setting the 2015/16 budgets, whereupon the Agency purposely under-committed funds with a

view to emerging business cases which were being developed to capitalise on high priority opportunities. Unfortunately, a number of issues had to be navigated and ultimately led to delays in the approval of the business cases. Due to the successful Comprehensive Spending Review (CSR) negotiations it is now foreseen these opportunities will be realised across the 2016-2021 CSR period.

To aid budgetary certainty over the next CSR period, the Agency entered into 14 new forward exchange contracts with the Bank of England amounting to €988m (£737m) to fulfil 90% of existing legal obligations for subscriptions to the European Space Agency between June 2016 and June 2020. The magnitude of these financial instruments has a material impact in the underlying value of the hedge contracts, which resulted in a recognised notional gain of £45.7m. These movements are outside the control of management and are therefore classified as Annually Managed Expenditure (AME).

Performance continued

ESA Programmes

The Agency continued to fulfil the commitments entered into at the ESA Council of Ministers 2014 and 2012. During 2015/16, a supplementary €5.6million contribution was agreed relating to Propulsion technology.

ESA's financial year runs from 1 January to 31 December. In 2015 the UK subscription levels were €342m. Existing confirmed commitments for 2016 stand at €330m.

ESA programme	2015 ⁽ⁱ⁾ subscriptions €000	2016 ^{(i) (ii)} budget €000
Mandatory Activities and Science Programme	113,6436	113,411
Earth Observation	78,676	57,381
Telecommunications & Integrated Applications	67,360	105,797
Robotic Exploration	41,576	33,370
GSTP	24,288	8,089
Human Space Flight & Microgravity	10,167	8,044
Galileo Programme and Navigation related activities	4,278	2,243
Security	1,978	1,701
Launchers	-	359
Total	341,967	330,395

Notes:

i. In line with ESA reports, the table above is based on calendar years rather than financial years.

ii. Budgets for 2016 do not include assumed future commitments, which will be agreed at the Council of Ministers in December 2016.

Net assets

Net assets at year end were £86.8m, which was an increase of £94.7m from 31 March 2015; the key movement being the upward revaluation of £66.4m relating to the newly placed forward exchange contracts during the reporting period. More information about forward exchange contracts can be found in [Note 7](#) to the accounts.

Cash

The cash balance at year end was £2million. 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 UK Space Agency does not hold any commercial bank accounts.

Sustainability report

The UK Space Agency falls inside the exemption limits for sustainability reporting and as a result we have not included a sustainability report.

Collaboration

By its very nature, space provides a unique vantage point for our planet and its surroundings. Space systems offer important insights into the way our planet works and demand close collaboration between governments and industries from around the world to design, develop, implement and support the necessary in-orbit and ground-based infrastructure. Over the last year we have worked with a range of stakeholders across the UK and around the world, including space industry, academia, international space agencies and other government departments.

Local and regional collaboration

The UK's ambitious growth aspirations mean that the benefits of the space sector could be felt across the whole of the UK. The UK Space Agency has continued to work closely with the Devolved Administrations (DAs) and Local Enterprise Partnerships (LEPs) to help them recognise the potential value that space may bring to their local economies. In July 2015, the Agency brought the three DAs and four of England's LEPs together at the UK Space Conference in Liverpool on a shared stand that showcased local strengths and interests in space in the context of a vibrant UK wide sector and gave the opportunity for SMEs from across the UK to exhibit. At the conference, the Aerospace Wales Forum, supported by the Welsh Government, launched the Welsh Space Strategy that outlines their aspirations for Wales to make a tangible contribution to the wider UK growth story.

During 2015/16, the UK Space Gateway at Harwell has continued to develop as a focal point for growth of the wider UK space sector. The campus has seen the opening by the Minister for Universities & Science of new buildings to house the ESA European Centre for Space Applications & Telecommunications (ECSAT) and RAL Space's new test facilities. The ECSAT facility already accommodates the Climate Change office, the Integrated Applications programme and some exploration work. In 2015/16 several successful conferences have been held at this facility, and there are more planned for 2016/17 including linking with the Organisation for Economic Co-operation and Development (OECD) and other international organisations. Alongside these exciting developments, the number of space organisations on the campus has grown to almost 60, employing an estimated circa 600 staff.

International collaboration

The cost, complexity and duration of space activities lend themselves well to international collaboration. The UK currently has 16 Memoranda of Understanding (MoU) with international space agencies including the signing of MoUs with the South African, Indonesian and United Arab Emirate Space Agencies in 2015/16.

The UK Space Agency continues to expand its reach and engagement with partner agencies across the globe, but works in particular with the European Space Agency (ESA) and the European Commission. We continue to use 80% of our budget to fund ESA programmes.



Case study: UK Space Conference

The UK Space Conference was held in Liverpool in July 2015 with over 1,000 attendees from the space community and beyond. Delegates were given the opportunity to hear from many high profile speakers including Dr Jan Woerner (the then newly appointed Director General of ESA) and Tim Peake 'live' from Space City, Baikonur in Kazakhstan. The Conference brought together UK space representatives with users of space-based services, entrepreneurs, academia, policy-makers, funders and students with a significant increase in the number of international delegates.

Collaboration continued

Investments into ESA programmes on average result in a return of over £10 per £1 we invest.¹

ESA has close institutional ties with the EU, which provided around 20% of ESA funding in 2015.

Participation in ESA Global Navigational Satellite Systems programme has provided research that enables UK industry to compete and win £700m of contracts with the EU Galileo programme.

¹ London Economics



Case study: Solar Orbiter

Solar Orbiter is an ESA mission to observe the Sun, taking a unique elliptical orbit to provide unprecedented close-up, high latitude observations. The mission is due for launch in 2018 and there is intense activity to complete the spacecraft and instruments to operate in this challenging environment. The UK is leading two key payloads; a magnetometer from Imperial College London and a suite of solar wind analysing instruments led by Mullard Space Science Laboratory. The spacecraft is being built by Airbus in Stevenage. NASA is also participating in this mission, contributing instruments and providing the launcher vehicle.

Over the past year the structural thermal and engineering models of the spacecraft and instruments have been developed and are undergoing testing. The flight models are now being built with the aim of completing them by the end of 2016 for integration and final testing before launch.

Credit: ESA

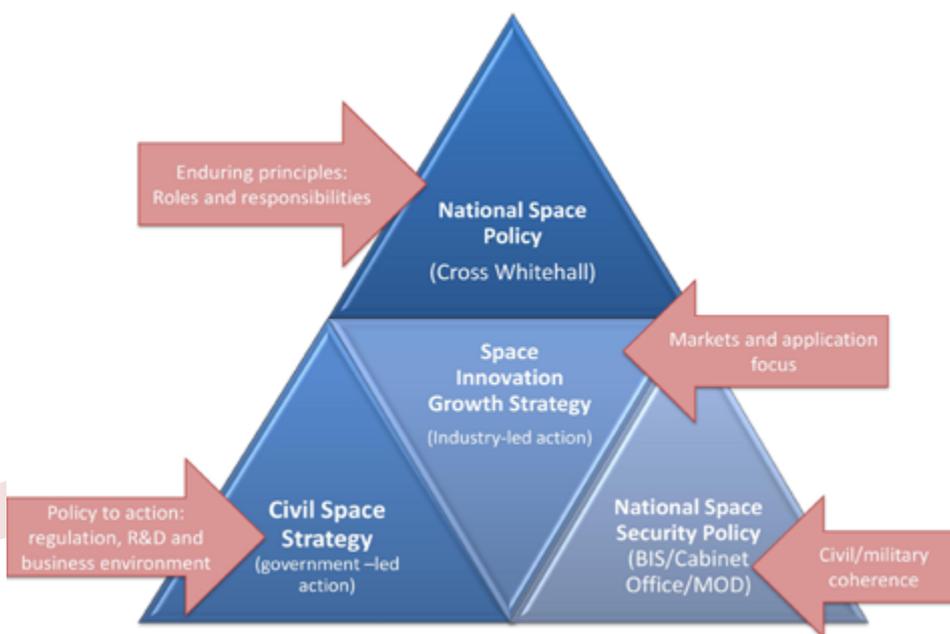
Policy

Setting the correct policy framework is vital to stimulate investment and drive growth.

The UK Space Agency is the UK government lead on civil security of space assets, the regulation and licensing of space activity, alignment with international statutes on space law, and the UK's national policy on space. We interact with Whitehall, working in partnership with government agencies, industry and academia to ensure the right environment for growth, security of space assets and the responsible use of space.

4. Government commits to cooperating internationally to create the legal frameworks for the responsible use of space and for collaborating with other nations to deliver maximum benefit from UK investment in space.

The National Space Policy can be found on our website [here](#). The 2016-2020 Civil Space Strategy will translate the National Space Policy into tangible deliverables for the civil space sector.



Space Innovation and Growth Strategy (IGS)

The Space Innovation and Growth Strategy (IGS) was conceived in 2010 to create a partnership between industry, government and academia to develop, grow and exploit new space related opportunities.

July 2015 saw the publication by UK Space of its IGS 2015 Update Report. The report summarises the IGS achievements since 2010 and outlines the plans for the next phase of the programme.

National Space Policy (NSP)

The NSP, published December 2015, describes how the UK will keep up with the swift pace of the international space sector and how we will support UK space industry in achieving their ambitions. The document sets out four interrelated policy headings:

1. Government recognises that space is of strategic importance to the UK because of the value that space programmes deliver back to public services, national security, science and innovation and the economy.
2. Government commits to preserving and promoting the safety and security of the unique space operating environment, free from interference.
3. Government supports the growth of a robust and competitive commercial space sector, underpinned by excellent academic research.

The formation of the Space Leadership Council (SLC) was a result of the Space Innovation & Growth Strategy (IGS) of 2010. The SLC is the high level forum through which the space sector engages with government and has been successful in assisting ministers with responsibility for space in developing their strategic policy. The SLC was restructured in January 2016; now a maximum of six standing SLC members including the Minister of State for Defence Procurement, MOD and the SLC co-chair, the Minister of State for Universities and Science, plus up to four guests chosen according to the agenda. The agenda is focused around growth (the main IGS recommendation), and the government activity required to support sector growth.

Policy continued

Security

Society is increasingly dependent on a growing number of personalised and automated services. Satellites are critical to delivering these, but, as our dependence increases, so too does our vulnerability. This reality underpins the importance of space security, which, in an increasingly commercialised and competitive environment often needs to balance Government's national security interests and long term financial risk with the enabling frameworks for sustainable growth in the sector.

Government's designation of the space sector as Critical National Infrastructure demonstrates the crucial contribution of space services. It also emphasises the importance of ensuring the resilience of key operators to events as diverse as extreme weather, physical intrusion, terrorist and cyber-attack.

The complexity of the space security challenge is captured in the [Strategic Defence & Security Review](#) published in November 2015. In committing to the establishment of a cross government Ministerial committee to coordinate action on both prosperity and security, Government recognises the strategic role of space in society. The Ministerial Committee is a cross- government focussed committee to de-conflict issues related to space security and prosperity. The Strategic Defence & Security Review also commits to action on satellite navigation, communications, space weather and space surveillance and closer collaboration between civil and military space interests.

Spectrum

Spectrum, the basis for wireless communications like Wi-Fi or mobile phones and sensors remotely monitoring Earth from space, is a finite resource that needs to be shared for its benefits to be maximised. Radio waves do transcend national borders and consequently spectrum use is coordinated internationally and revised every four years at World Radio Conferences. Following complex domestic and international preparatory negotiations with Government and industry stakeholders, the UK Space Agency secured a favourable outcome at the World Radio Conference 2015 that supports and maintains space sector growth.

As part of the Government's aim to provide wider access to space and remove barriers to further growth of the sector, the UK Space Agency signed an agreement with Ofcom in May 2015. The Agency works closely with Ofcom to ensure the space sector's radio spectrum needs are fully addressed.

Regulation

Effective regulation is essential to creating an enabling framework that supports long term sustainable growth whilst adequately managing Government's risk and national security. As the space sector continues to grow and innovate, it is critical that the sector's regulatory framework meets the challenge of these changes. In part, this means we keep our objective to processing 90% of licence applications within published deadlines. These targets are to ensure that licensing decisions are taken prior to the launch of a space object. We work with operators from the earliest mission planning stages to provide advice and guide them through the licensing process. This encourages safer missions and increases the likelihood of a successful license application.

In 15/16, the Agency issued 13 OSA licences, 100% of which were processed within published deadlines.

To maintain our effectiveness, our regulatory framework also needs to adapt to the needs of a rapidly changing market place. Building on measures such as the waiver of insurance premium tax in 2014, over the last year the UK Space Agency has:

- capped the previously unlimited liability of UK operators;
- continued to develop a traffic light based approach to small satellite licensing;
- developed a regulatory framework for high resolution satellite data;
- considered options for streamlining insurance requirements for satellite constellations;
- continued work to review the charging regime for OSA licensing; and
- developed the operating procedures for overseeing the use and manufacture of the Galileo Public Regulated Service and created the legal framework to support this.

Case study: Space surveillance

There are now more than 20,000 tracked objects of which only around 1,000 are operational satellites. At closing speeds reaching 50,000 km per hour, even the smallest parts of space debris can harm spacecraft. As Government holds unlimited liability under UN treaties for damage caused in space or on the ground, our ability to protect UK registered assets is essential.

Over the last year the UK Space Agency has built strong partnerships with civilian sensor operators and military counterparts. This has enabled the UK Space Agency to become one of the founder members of the EU Space Surveillance & Tracking (SST) Consortium, alongside France, Germany, Italy and Spain. Consequently, the UK Space Agency now leads the UK's contribution to this work with the support of MOD, DSTL, STFC, NERC and industrial partners.

Supported by European Commission funding, the consortium is now starting to upgrade their respective national infrastructures into a broader, networked capability to help protect European and nationally registered satellites. This will enable Europe to monitor and track space objects and debris to avoid collisions and detect fragmentation events. It will also monitor the uncontrolled re-entry of space objects into Earth's atmosphere.



Policy continued

European policy

The UK Space Agency has continued to be active in ensuring that EU funding is used in line with UK objectives. The Agency holds the Commission to account for the management of the EU space programmes and when discussing new EU space legislation, the Agency leads the negotiations on behalf of the UK.

The European Union's involvement in space has continued to grow over the past year. The total funding allocated to EU space activities between 2014 and 2021 is approximately €12 billion and the UK Space Agency has continued to support industry to compete fairly for contracts for programmes such as the EU's satellite navigation programmes Galileo and EGNOS. The pace of the Galileo programme picked up significantly in 2015 with the successful launch of six satellites throughout the year. The initial services milestone, expected towards the end of 2016, will be a key achievement in the ultimate delivery of Galileo's full operational capability, currently planned for 2020.

Other key EU space programmes include the Copernicus Earth Observation programme which successfully launched Sentinel 2a and 3a. Copernicus is now generating significant quantities of new data. Making the data available to users is the key building block for the expected growth in the applications and services market. The UK Space Agency has successfully influenced the ground segment strategies of both ESA and the EU and has begun a UK Ground Segment strategy to ensure the benefits can be realised in the UK. EU support for research and development into space technologies and services continued through the Horizon 2020 programme, with €1.5 billion allocated to space and opportunities for significant space research and development to be done in other sectors such as transport.

During 2015/16, the European Commission announced that it will develop a European Space Policy, likely to be launched in October 2016. The UK welcomed this initiative and is working with the Commission to explore how the strategy can support UK objectives on the growth of the UK space sector.

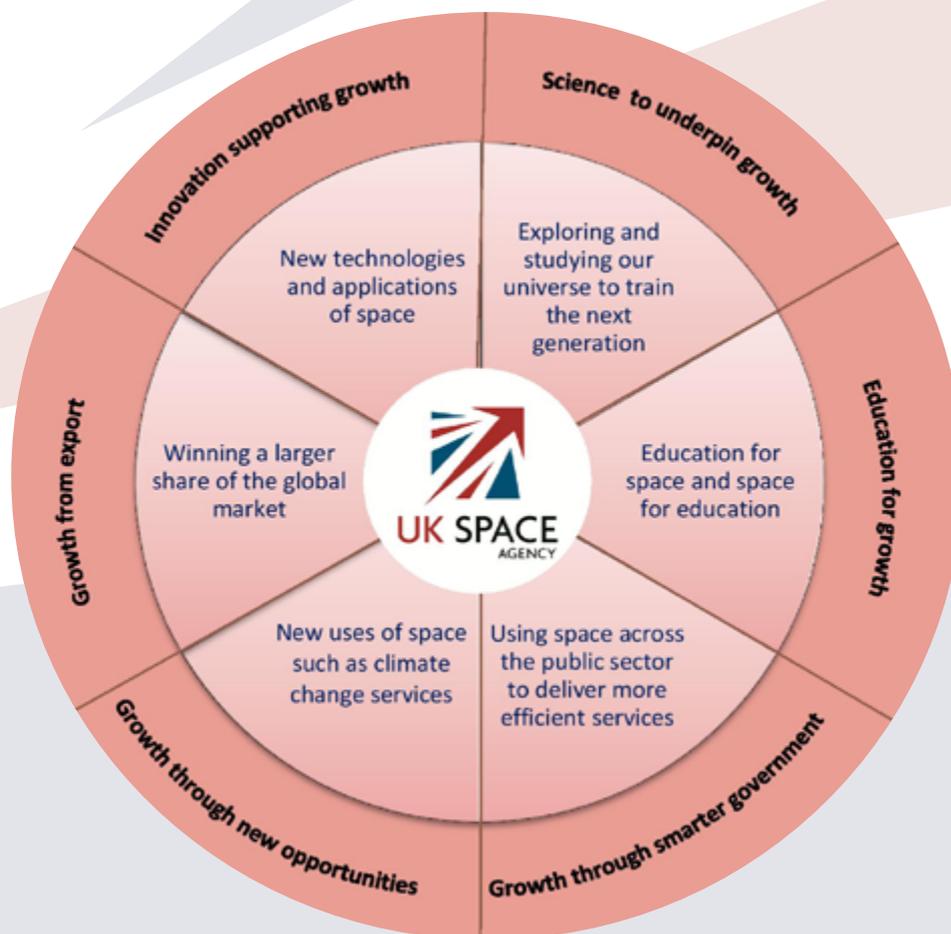


Sentinel 2A launch. Credit: ESA

Our work

Our vision is to grow the UK space economy to capture 10% of the global space-enabled market by 2030. The Agency's strategy for delivering this growth was outlined in the Civil Space Strategy 2012-2016, where six pathways to growth were introduced.

In 2015/16 we made great progress. This section, grouped by our six pathways to growth, shows the breadth of our work as a representative look at the past year.



Innovation supporting growth

The UK has an exceptional scientific landscape. With 3% of the global funding for research, the UK produces 16% of the world's most highly-cited articles, and is ranked second in the 2015 Global Innovation index. The UK Space Agency continues to invest and support development of new infrastructure and technologies that will keep the UK space sector competitive in the global market.

Technology

Technology frequently lies at the heart of innovation. The UK Space Agency has its own National funding mechanism, the National Space Technology Programme (NSTP). The core of this programme is a ladder of grant funding from small exploratory ideas projects right up to flagships aimed at bringing innovative new technology capabilities to market readiness. In 2015/16 the following calls were initiated:

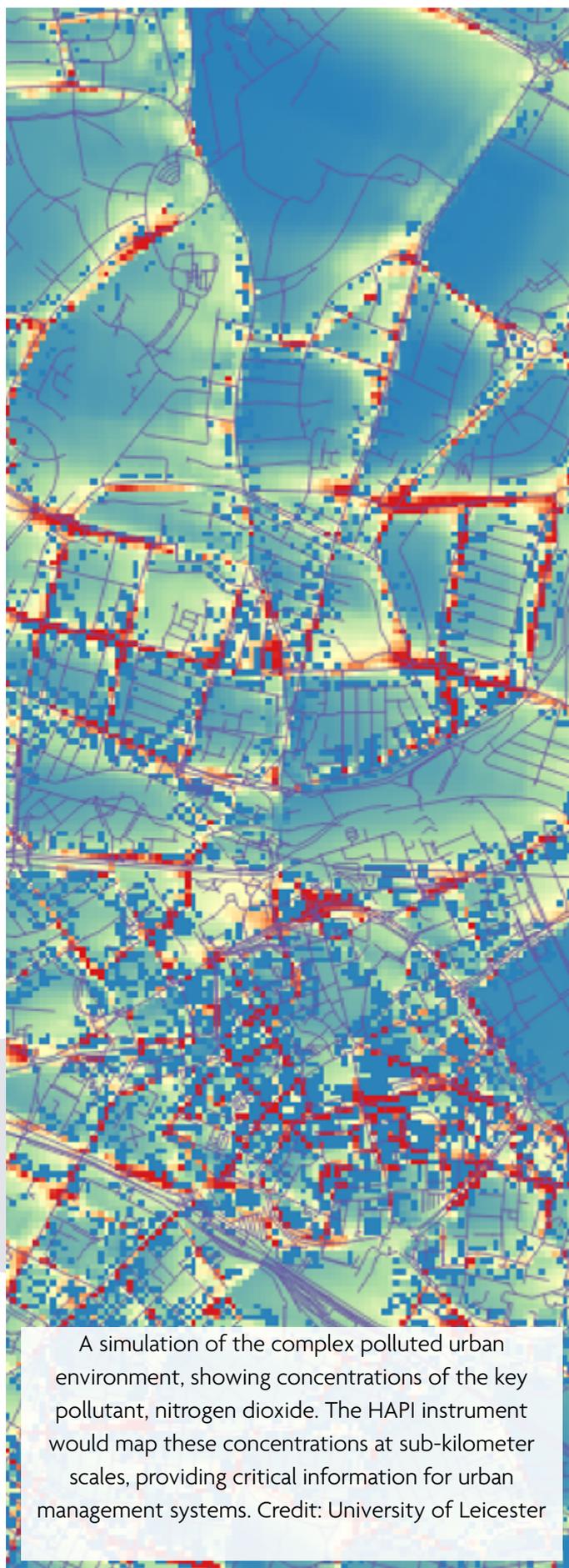
Call name	Budget (£)	Number of projects
Exploratory Ideas	10K	23
Pathfinder	50K	16
Fast Track	150K	25
Flagships	1 million	2

One of the Flagship projects will produce the technology for a constellation of small satellites to measure emissions of the major pollutant Nitrogen Dioxide. This will ultimately provide data of sufficient frequency and resolution to allow applications such as targeted warnings for asthma sufferers and active traffic management to keep vehicles from the most heavily polluted roads (as the simulated pollution map opposite illustrates).

UK's subscriptions to mainstream ESA technology funding – particularly the General Support Technology Programme (GSTP), are the cornerstone of UK Space Agency technology support that positions UK technology for widespread commercial use in global markets.

NovaSAR

NovaSAR is an innovative and low-cost S-band radar satellite that is being designed and built by Surrey Satellite Technology Limited (SSTL) to deliver medium resolution Earth Observation data. To help support the development of the first NovaSAR satellite, the UK Space Agency is providing up to £21 million.



A simulation of the complex polluted urban environment, showing concentrations of the key pollutant, nitrogen dioxide. The HAPI instrument would map these concentrations at sub-kilometer scales, providing critical information for urban management systems. Credit: University of Leicester

In 2015/16, the satellite build remained on schedule and has now moved into its final stages, including integrated spacecraft testing, and the launch of the first NovaSAR is planned for winter 2016. Significant benefits are expected from launching the first NovaSAR satellite, selling data from that satellite and providing data through the Satellite Applications Centre to stimulate the development of new commercial applications.

Synergetic Air-Breathing Rocket Engine (SABRE)

The UK Space Agency is providing funding of up to £60 million to Reaction Engines Ltd to aid the development of its innovative engine.

SABRE is a revolutionary design which combines rocket and conventional jet propulsion into a single engine. Initially the engine will work as an air-breathing jet while in the Earth's atmosphere using Reaction Engines' innovative, ultra-lightweight heat exchanger. Once in space, SABRE will then switch to a conventional rocket engine using on-board liquid oxygen. This hybrid engine technology could be an important step in the development of a multi-use single-stage to orbit spaceplane that will require less fuel than current expendable rocket launch vehicles.

The first £10 million of funding for engine development is being delivered via the European Space Agency's General Support Technology Programme to support development work up to the Preliminary Design Review. In 15/16, the

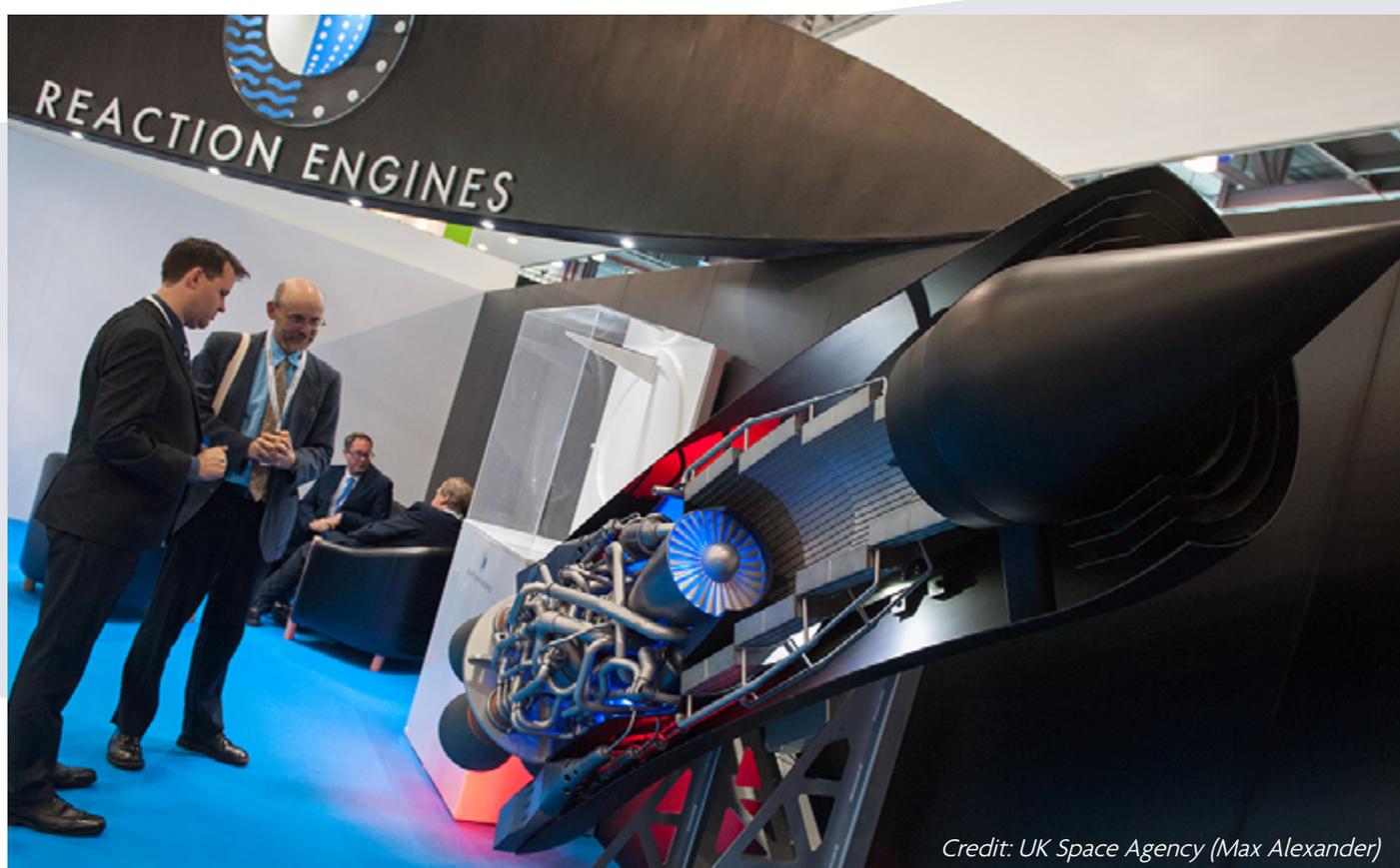
remaining funding of £50 million was approved under a grant agreement with Reaction Engines and will be used to take the project through to its final Critical Design, at which point the key technologies and design features are proven.

Ukube-1

UKube-1, the UK Space Agency's first CubeSat mission, has now completed its nominal mission following over 14 months of operations.

Launched in July 2014, UKube-1 is a three unit CubeSat flying four main technology demonstration payloads. UKube-1 has helped maintain the UK's leading position in the CubeSat sector. Participation in the mission has provided real long term benefits to Clyde Space Ltd (the spacecraft platform developer), Bright Ascension Ltd (the on board and ground segment software developer) and the payload providers.

The Agency has undertaken lesson learned exercises for the build and operations phases of the mission, with outcomes feeding into its next CubeSat mission AlSat Nano, a collaboration between Surrey Space Centre (University of Surrey) and the Algerian Space Agency which is currently due for launch in August 2016. AlSat Nano is building long term Algerian space capability by training Algerian students to develop and operate a full CubeSat, as well as accelerating UK growth through free flight opportunities for UK payload providers.



Credit: UK Space Agency (Max Alexander)

Growth from new opportunities

The Agency is working to capitalise on new opportunities as they arise; identifying potential new markets, supporting industry initiatives and making the most of new collaborative European programmes. The space sector will grow through space-enabled businesses operating in a wide range of sectors not normally associated with space. We are supporting start-up companies through our partnership with SETSquared. Our support for SETSquared, who were announced Global top University Business Incubator in November 2015, has built interest in space across their network of incubators in the south of England. To complement this, we have extended the network of incubators with a further six new incubation centres, building upon local strengths and experience.

ARTES

The UK participates in ESA's Advanced Research in Telecommunications Systems programme in order to retain UK competitiveness and growth in this key commercial space sector area. UK support to the Integrated Applications Promotion (IAP) programme has seen development in the arena of downstream services and applications in a diverse range of sectors such as health, transport and safety. In July 2015 upon the inauguration of the European Centre for Satellite Applications and Telecommunications (ECSAT), the contract for Quantum was signed. This innovative UK industry led programme will see the development of new highly flexible geostationary telecommunications satellites capable of being reconfigured in orbit.

National spaceflight programme

The UK Government's National Space Policy sets out the aspiration to establish a spaceport in the UK. The Government believes that its ambition in this emerging market can incentivise regional and international investment, has the potential to create new high value job opportunities and support our existing cutting-edge technology companies. As part of a cross governmental programme, we are examining the case for commercial spaceflight and small satellite launch activities. A team has been established within the Agency working with its parent Department for Business, Innovation and Skills (BIS), the Department for Transport (DfT), Civil Aviation

Authority (CAA), Foreign Commonwealth Office (FCO) and the Ministry of Defence (MOD). The focus was on developing an understanding of the technical, commercial and regulatory requirements needed to facilitate the operation of these innovative technologies safely, alongside existing civilian and military airspace operations via liaison with organisations, here and abroad.

وكالة الإمارات للفضاء
UAE SPACE AGENCY



Growth from exports

The UK space economy generates 31% of turnover abroad; this means the UK space economy's export share is more than double the export share of the UK economy as a whole (15%)². The UK Space Agency is playing an active important role in facilitating space exports.

Space offers crucial benefits to any national economy - after all we live in a space-enabled world with ready access to in-car navigation, mobile phones and continuous TV news and weather coverage. However, many nations are not able to take up these advantages and so cannot offer potential markets for UK goods and services. The UK Space Agency therefore seeks to establish relationships with key international partners to share best practice in the use of space for new economies. To do this, the UK Space Agency plays an active role in sharing our expertise and experience in upstream (satellites) and downstream (services). In 2015/16 our focus has been on the emerging space economies. Over 20 countries are now engaged with the UK in joint projects including those from Latin America, Africa, the Middle East and Asia.

In partnership with industry, the UK Space Agency has initiated a Strategic Export Committee, in line with recommendations from the Innovation and Growth Strategy, to better coordinate UK industry and government export activities. The UK Space Agency supported export missions to the USA, while a maritime/space workshop coincided with our MoU signing in Indonesia. We welcomed Chinese colleagues to the 10th UK/China Space Science and Technology workshop at Newbury in September.

On the inward investment side, the UK welcomed significant interest from industries as far afield as the USA, Canada, Israel, Spain and France. As part of our attendance at the International Astronautical Congress in Jerusalem, we conducted an inaugural meeting with the Israeli Space Agency which has already led to industrial activity.

²Case for Space 2016

International Partnership Space Programme (IPSP)

IPSP has now come to the end of its two year pilot. Due to its success in creating long lasting partnerships and developing space capability abroad to solve everyday problems, the programme will be continuing as the 'International Partnerships Programme'. IPSP saw 20 UK-led projects collaborate with countries from all over the world. These projects all used British expertise in satellite technology and data to showcase satellite applications and establish the UK as the partner of choice. They range from working with the South African Government to tackle sea safety, to working with the Malaysian Government to enhance communication in disaster zones to using satellites to monitor and model crop conditions in remote areas of the world.

Beyond the immediate benefits from the programme, we will be tracking the longer term benefits to overseas partner organisations as well as to UK business. The projected economic benefits to the UK are in excess of £100 million.

The partnerships developed with overseas Governments and organisations have already created additional opportunities beyond the original IPSP projects. The case study on the next page shows just one snapshot of the 20 projects within IPSP.



Case study: Avanti iKnowledge

Avanti has been working with Tanzanian partners to deliver ICT infrastructure and an e-learning programme to teachers across Tanzania. The programme has equipped 250 schools across Tanzania to enable them to connect to the internet via satellites. The project has delivered online educational resources for teachers, trained school teachers at the academies and performed a sustainability trial with Wi-Fi hotspots and solar power. However the project does not stop here and will continue into 16/17 to ensure that the services are sustainable beyond the life of the project.



“Before we installed the internet in our school, only 15 students made it to A-Level. But now with internet, we have sent 51 students.” -Mr John S Massawe, Headmaster at Mwandet Secondary School, Arusha, Tanzania

Science to underpin growth

The Agency believes in the intrinsic value of science as a national endeavour. Through membership of the European Space Agency, we are supporting cutting edge scientific missions that are at the very limit of human endeavour and support the science goals of the Research Councils.

ExoMars

ESA's ExoMars mission will see a UK-designed rover launched to the surface of Mars in 2020.

2015/16 saw the successful launch of ExoMars 2016 which is the first half of the mission to search for evidence of methane and other trace atmospheric gasses that could be signatures of active biological or geological processes on Mars. UK involvement in the 2016 mission is through the Open University who employ the co-Principal Investigator for the NOMAD (Nadir and Occultation for MArS Discovery) instrument on board the probe.

LISA (Laser Interferometer Space Antenna) Pathfinder

LISA Pathfinder, an ESA science mission to test the technology needed to measure gravitational waves in space, launched successfully on 3 December 2015 from the European Spaceport in French Guyana. This UK-led spacecraft will help to open up a completely new window onto an unseen part of our Universe, by demonstrating the ground-breaking technology required to observe gravitational waves.

Airbus Defence and Space built the spacecraft and acted as the architect for the experimental payload on behalf of ESA. SciSys UK developed the satellite's on-board software, and UK scientists from the Universities of Birmingham, Glasgow and Imperial College, London designed and built elements of the complex experimental instruments. The UK's involvement in LISA Pathfinder's technology demonstration payload and in the operational phase of the mission is funded by the UK Space Agency.



LISA Pathfinder ready for launch. Credit: ESA

Science to underpin growth continued

PLATO (Planetary Transits and Oscillation of stars)

PLATO is an ESA science mission to discover Earth-like planets, or exoplanets, orbiting other stars. In September 2015, Jo Johnson, Minister of State for Universities and Science, approved a £25m investment for PLATO from the BIS long term capital investment fund for science and research.

To achieve its science objectives, PLATO will require the largest camera focal plane ever flown in space. The UK is responsible for the development and large scale production of the electronics for these cameras, which is being led from University College London's Mullard Space Science Laboratory. The Science Lead for the mission as a whole belongs to Warwick University. Involvement in this cutting-edge mission will maintain UK international competitiveness in world class scientific research and technology innovation, generating economic growth and inspiring the next generation of space scientists and engineers.

Earth Observation (EO)

Earth Observation is vital to the UK economy and was reflected as a KPI for the UK Space Agency in 2015/16. The UK Space Agency EO activities cover all aspects of design, launch and operations of earth observing missions, as well as focussing on the data use and conversion into information and services for users which completes the feedback loop.

The strength and breadth of the EO stakeholder community in the UK demonstrates the importance of the role that the UK Space Agency plays in securing funding and making decisions within ESA, in the EU and on international programmes. A significant highlight for the UK was winning the €227million Prime contract to build the ESA BIOMASS mission to be launched in 2020.

The UK Space Agency team, assisted by an esteemed panel undertook an evaluation of the Centre for Earth Observation Instrumentation (CEOI) EO projects sponsored over the last ten years. The combination of the seed monies for projects, workshops to build the



community across academia and private sector and the teaching of sound space quality programme delivery to UK teams has paid off. There is now an active, connected and informed EO instrument development community with vision and ambition.

Another major success is that UK academia and industry have won roles in all (and the leadership of four) of the seven major climate services contracts tendered by European Centre for Medium-Range Weather Forecasts in January 2016. This is a direct result of the UK Space Agency led 'Climate Data from Space Coordination Group' run by the University of Reading.

Microgravity and human space flight

The UK Space Agency participates in ESA's International Space Station (ISS) programme, and the complementary European Life and Physical Science Programme (ELIPS) which delivers science on the ISS and a range of other space-analogue facilities, such as drop towers, parabolic flights and Antarctic stations. The most high profile part of this programme has been the mission of British ESA astronaut Tim Peake. His mission has seen the UK Space Agency and ESA work closely together to deliver a range of education, outreach and science and

technology research. New metallurgy experiments, using the Electromagnetic Levitator on-board the Station to measure physical properties of metals, are enabling the development of new alloys for industrial applications. In parallel, a team from University of Leeds are running complementary ground tests to corroborate measurements and refine models for new materials. The British Antarctic Survey have delivered new research for ESA, to better understand the effects of isolation on astronaut health and behaviour.



The British Antarctic Survey's Halley VI Research Station. Halley is a unique natural laboratory for research into human space flight because of its isolation and long periods of darkness. Credit: British Antarctic Survey

Education for growth

The Agency's education, skills and outreach programme aims to both use space to inspire young people to learn more about science and engineering and to ensure that there are enough people with the right skills available to work in the space sector. We also aim to engage the public with the UK's space programme. To do these things we have a wide-ranging programme of activities aimed at different age groups and work with a large number of different partners in order to reach different audiences. Our biggest partners are the Space Education Office (ESERO-UK) and the National Space Academy – both of which support teachers.

The IGS recommended the Agency create a National Skills Point of Contact post which is now in place. We have negotiated with many partners to set up an online portal to help young people find out about careers in the space sector and to locate jobs, as well as running the Space Placements in Industry scheme to provide students with experience of working in the space sector.



Credit: UK Space Agency (Max Alexander)

Tim Peake education programme

The biggest programme of education activities is that designed to support Tim Peake's Principia mission to the ISS. Working closely with ESA, the Agency is supporting approximately 30 separate projects with over 70 different partners aiming to inspire greater interest in science and engineering among young people of all ages across the UK.

The Mission X: Train like an astronaut programme has gone from strength to strength, with 21,500 young people signed up in the UK during 2015 and over 35,000 signed up for 2016 (more than the rest of the 28 international partners put together). The international challenge uses the model of astronaut fitness and health to encourage pupils between eight and 12 years old to become more active and to learn about the science of nutrition and exercise.

Tim has 2Kg of rocket seed on board the ISS which will be distributed to schools in spring 2016 as part of the Rocket Science project. Pupils will grow samples of these seeds alongside similar packs of seeds that have not flown in space in order to compare their growth to see if they would make suitable crops for long-duration space missions - and learn about science methodology in the process. By the end of January 2016, 6,500 schools had signed up for seeds, representing over 300,000 pupils. The project is a collaboration between the UK Space Agency and the Royal Horticultural Society's Campaign for School Gardening and was launched with a high-profile stand at the Chelsea Flower Show.

Tim also held a live in-flight call with UK students; which was streamed live to over 292,000 individual students and ARISS, Amateur Radio on the ISS, have successfully negotiated with NASA for all ten schools shortlisted in the UK to be granted a live link to the ISS.

The Agency is also funding a large programme of shows for families, called Destination Space, delivered in 20 science and discovery centres across the UK and aimed at around 250,000 younger children to encourage them to consider science as a future career.



Tim Peake's spacewalk on 15 Jan 2016 Credit: ESA

Growth through smarter government

Using space technology and data enables the public sector to save money, to innovate and make more effective policy decisions. Earth Observation, satellite navigation and satellite communications are now well established tools that all of us rely on in everyday life and which are used within government.

Space for Smarter Government Programme (SSGP)

The Space for Smarter Government Programme (SSGP) is a strategic, national programme established in 2014 and led by the UK Space Agency. It is delivered in collaboration with the Satellite Applications Catapult to drive the uptake and use of space products, data and services across government departments. The programme has three objectives:

- raising awareness of space and satellite enabled services,
- improving access to data, information and services
- enhancing industry and government capability.

SSGP provides the secretariat for the cross government working group led by Stephen Lovegrove, the DECC Perm Secretary. A successful cross government and industry day was held at the start of the year to inform Stephen Lovegrove's recommendation to the Cabinet Secretary.

Of the ten 'phase 1' feasibility studies conducted in 2014/15, three projects were awarded grants in November 2015 to complete a phase 2 grant demonstration phase in 2015/16. These three projects concluded in March 2016

and have considered areas of health screening, coastal flooding and air quality monitoring. The key users are likely to be Defra, Environment Agency, Cabinet Office, NHS, local health providers and Local Authorities. This has led to three operationally ready services being delivered to government.

In addition to the phase 2 grant demonstrators, SSGP awarded ten Small Business Research Initiative (SBRI) phase 1 contracts in November 2015. These contracts were focussed on three challenge areas: Natural Hazard Risk Management, Environment and Local Authorities / Devolved Administrations.

In December 2015, Defra published their roadmap for their use of space – this is a flagship roadmap for SSGP as it paves the way to work with more government departments in the future. There is also ongoing work with the Defra Centre of Excellence and with their ongoing project looking at Earth Observation Data.

Disaster Charter

The UK Space Agency is a Board Member of the International Disaster Charter organisation. The International Charter aims to provide a unified system of space data acquisition and delivery to those affected by natural or man-made disasters.

There have been 39 Charter activations throughout the 2015-2016 period and the UK has directly coordinated several of these with its DMC satellite network, delivering over 100 satellite images.

Case study: Seal Level Space Watch

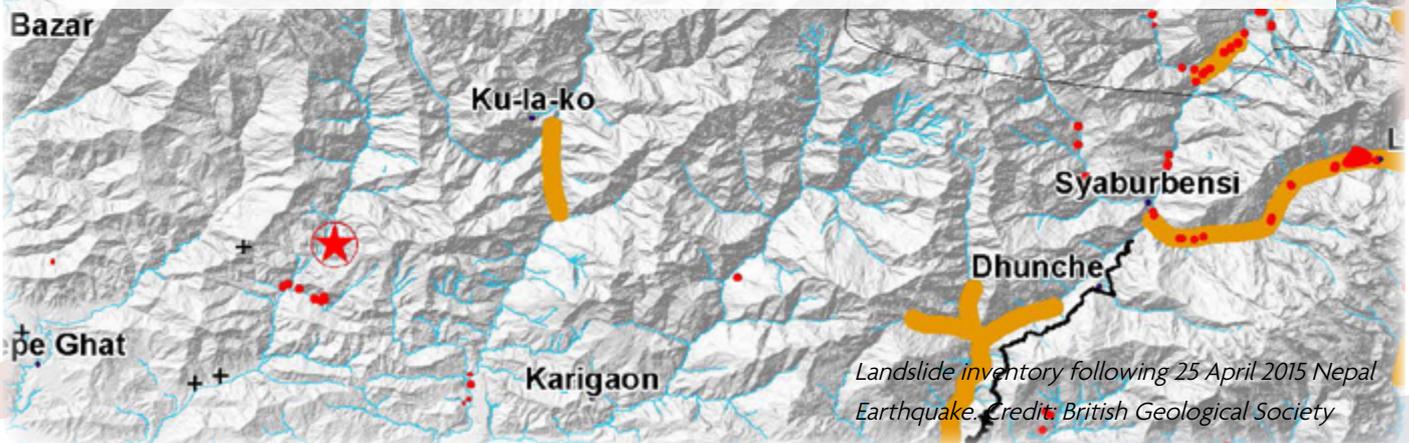
Satellite Oceanographic Consultants Ltd. and National Oceanography Centre are running phase 2 of their project to develop a service to support the management and planning of national flood defences and for the preservation of coastal habitats threatened by sea level change.

Using data from satellite altimeters in combination with tide gauge data, Sea Level Space Watch provides the latest figures on observed sea level around the UK. Coastal flooding is the second highest priority on the government's National Risk Assessment and the costs of managing and mitigating this risk are very high; this tool could help to significantly reduce these costs.

Case study: Nepal earthquake

On April 25 2015, a devastating earthquake affected Nepal and nearby regions, killing thousands of people and affecting millions, which led to one of the major disaster activations for the Charter in 2015. Many countries, including the UK, promptly assisted the Nepalese government in the relief and reconstruction efforts. Different stakeholders in the UK engaged with the Charter, including Cabinet Office, DFID, BGS and GO-Science, leading to creation of satellite-image based value added products such as wide scale landslide maps.

Following the Nepal earthquake there was additional interest across UK government departments in the use of satellite information for emergency response. In response to this, the UK Space Agency hosted a one day workshop in London, bringing together technology experts and users from across the UK to learn how to more effectively use satellite data and geographic information for disaster management.



Katherine Courtney

Interim Chief Executive and Accounting Officer

27 June 2016

Corporate governance report

Directors report

In last year's Directors' Report (which can be found [here](#), pg54) my predecessor highlighted a number of assurance priorities for financial year 2015/16. I am pleased to report the Agency has made a good progress in meeting these goals. In particular, the Agency's revised Framework Document will be published on our website; and the review of Agency's advisory bodies was completed in May 2015, details of which can be found on our website [here](#).

In common with other parts of BIS, the Agency remains committed to maximising its efficiency and ensuring outputs are delivered with the best value for money. While the impact of BIS2020 on the Agency is not yet clear, we shall play a full role in delivering targeted efficiencies as necessary.

The Agency maintains a Continuous Improvement Action Plan which tracks the progress of implementing the recommendations of audits, arising from staff surveys, business development and best practice. Progress is monitored quarterly and presented to the Executive Board and Audit Committee. Completing these actions ensures our processes are undertaken in alignment with best practise.

This year has seen the implementation of the updated quarterly performance dashboard, project tracker and risk register, building on the lessons of last year's inaugural dashboard and aligning the Agency's performance reporting more closely with our BIS sponsor.

Statement of the Accounting Officer's responsibility

Under Section 4(6) of the Government Trading Funds Act 1973, the Treasury has directed the UK Space 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 state of affairs of the UK Space Agency and of its net resource outturn, application of resources, changes in taxpayers' equity and cash flows for the financial year.

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

- observe the Accounts Direction issued by the 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 accounts on a going-concern basis

The Department for Business, Innovation and Skills has appointed the Chief Executive as Accounting Officer of the UK Space Agency. The responsibilities of an Accounting Officer include responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, keeping proper records and safeguarding the UK Space Agency's assets, as set out in Managing Public Money, published by HM Treasury.

Governance statement

In my role as UK Space Agency interim Chief Executive and Accounting Officer, I am required to produce an annual governance statement. The Agency's previous Chief Executive, Dr David Parker, left the Agency on 31 March 2016 and 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.

This governance statement sets out the governance, risk management and internal control arrangements for the UK Space Agency. It applies to the financial year 1 April 2015 to 31 March 2016 and up to the date of approval of the Annual Report and Accounts. I am supported in my role as interim 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 meeting minutes and associated supporting papers to cover risks, finance and operational performance
- the policies in place impacting on risks such as fraud 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).

To my knowledge, there is no relevant audit information of which the National Audit Office (NAO) are unaware. I have taken all the steps necessary to ensure any relevant audit information is available to the NAO.

Legal status

The UK Space Agency is an Executive Agency of BIS and does not have a separate legal status outside of BIS. 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 BIS, which is the 'Authority'.

Governance structure

The UK Space Agency is accountable to BIS and to Parliament for the funds it expends. Parliament monitors and influences the UK Space Agency through its Select Committees and the Parliamentary Ombudsman. The Science and Technology Select Committee held a review on 'Satellites and space' in February 2016, the report is published here: <http://www.publications.parliament.uk/pa/cm201617/cmselect/cmsctech/160/160.pdf>.

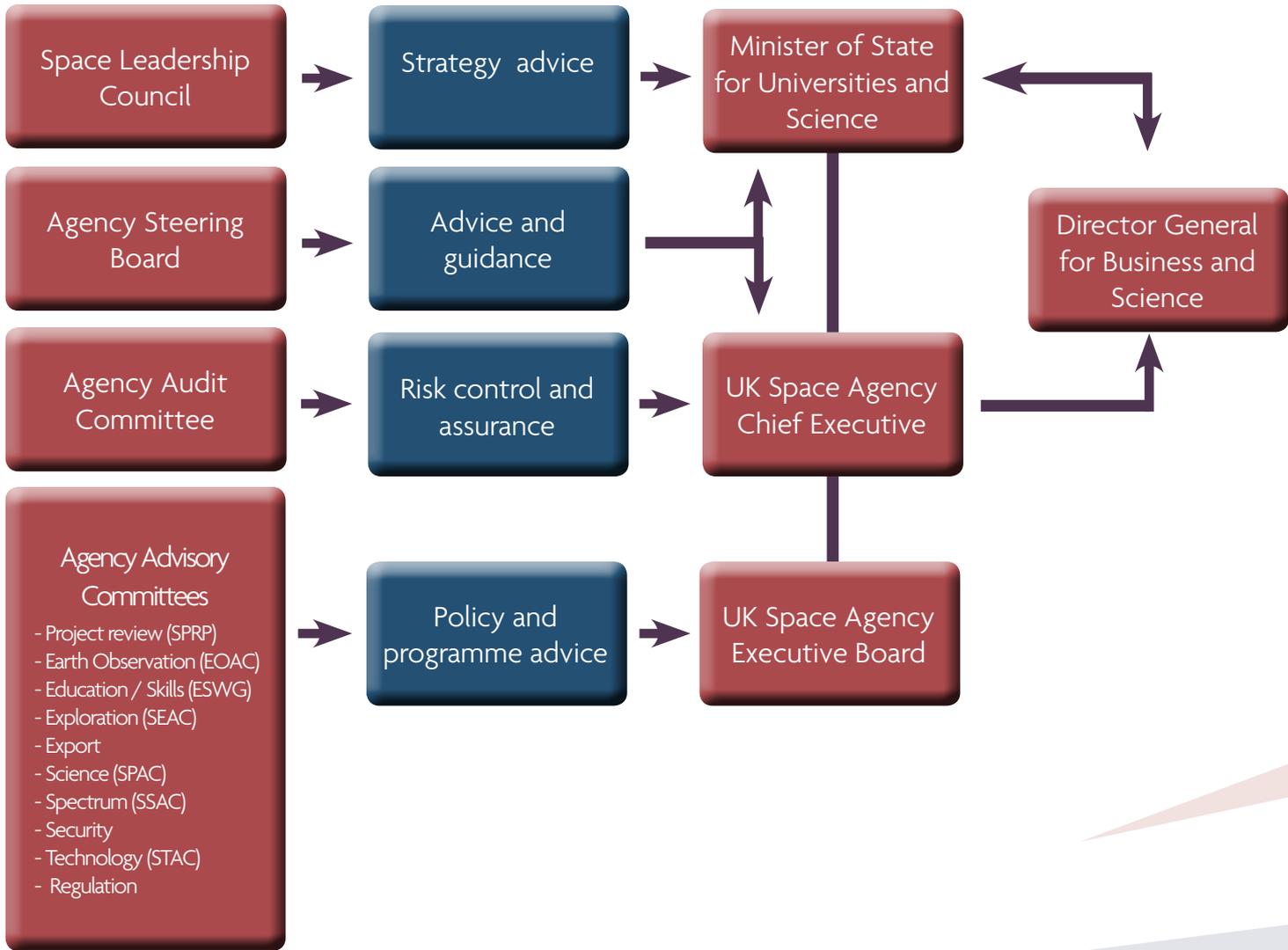
The UK Space Agency's working relationship and lines of accountability with its sponsor department, BIS, are defined in the recently updated UK Space Agency Framework Document, Corporate Plan, Allocation Letter(s) and Letter(s) of Delegated Authority made to the Chief Executive. These documents are subject to periodic review. The Agency is also held to account through regular reviews with our BIS sponsor team focussing on operational performance. These help ensure active engagement and a transparent relationship with our parent department.

Governance and advice

The model on the following page shows the governance arrangements and channels of advice provided to me, as the UK Space Agency Chief Executive.

Governance statement continued

Advice and governance



Steering Board

The primary role of the Steering Board is to advise the Chief Executive and their executive team, and to ensure that the UK Space Agency has strategies and plans with clear targets and milestones. The Steering Board monitors performance against these strategies and plans.

The Steering Board membership is comprised of four independent non-executive members, the Chief Executive (with Accounting Officer responsibilities), the Senior Information Risk Officer (SIRO) and a BIS internal appointee. In addition to the Steering Board members, the remainder of the UK Space Agency Executive Board attend as required. The Steering Board complies with the Corporate Governance Code.

There has been a change to the Chair of the Steering Board during the year. Rob Douglas' tenure as Chair ended in 2015 and his replacement, David Southwood, accepted the role with effect from 10 June 2016. Frances Saunders acted as Chair at the two Steering Board meetings which took place between Rob's departure and David's appointment. All Board meetings remained quorate throughout the year.

David Southwood previously held a non-executive member position within the Agency which shall now be subject to recruitment action.

All external interests are listed in the Register of Members' Interests. This register of UK Space Agency Members' private, professional and commercial interests is maintained by the UK Space Agency and is reviewed prior to each Steering Board meeting. The members of the Steering Board, their Terms of Reference and the minutes of meeting discussions are available on the UK Space Agency website: <http://www.gov.uk/ukspaceagency>.

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 two, independent non-executive members, one BIS internal appointee, the Chief Executive and the SIRO. The meetings are also attended by the representatives from Internal Audit and the NAO. The Agency's Executive Board members attend as necessary. Our BIS appointee, Grazyna Kazmierska, from

the Agency's BIS sponsor team, was appointed in June 2015 to ensure quorum is reached at each meeting and to provide additional financial expertise.

External appointments are made in line with HMG guidelines for an initial term of office of three years and, exceptionally, can be extended for a further two years. Members' interests are listed in the Register of Members' Interests. The Terms of Reference of the committee are available on the UK Space Agency website: <http://www.gov.uk/ukspaceagency>.

The Audit Committee generally meets on a quarterly basis but can meet more frequently to deal with exceptional matters. Five meetings were held during 2015/16, one of which was an ad-hoc meeting.

“The Audit Committee has continued to work on ensuring the Agency has effective systems and controls in place supported by a robust process for gathering evidence in support of the Agency's assurance statements of internal control. The Risk Register has been fully appraised and a new risk strategy is now in use. We continue to scrutinise the Continuous Improvement Action Plan including monitoring the completion of outstanding audit actions. Finally, the committee has taken a close interest in understanding the cyber threat to the Agency, including the examination of disaster recovery plans for its accounting systems.”

Clive Tucker, Chair of the Audit Committee

Governance statement continued

Non-Executive Members of the UK Space Agency

<p>Prof David Southwood New Chair of the Steering Board</p>	<p>Appointed 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. Before becoming chair, David served as a member of the Steering Board.</p>	
<p>Rob Douglas Chair of Steering Board until November 2015</p>	<p>Rob took up the role in November 2011 and after his four year term as Chair, stepped down in November 2015. Rob's appointment was for three years with a reappointment for one year.</p>	
<p>Clive Tucker Member of the Steering Board and Chair of the Audit Committee</p>	<p>Appointed in December 2014. Clive is a solicitor and until 2010 was a corporate partner of international law firm Ashurst LLP. In addition to his role with the UK Space Agency he runs a business consultancy, is a non-executive member of the National Committee of the Forestry Commission England and a non-executive member of the Single Source Regulations Office.</p>	
<p>Dr Frances Saunders, CB Member of the Steering Board and Audit Committee</p>	<p>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 Dstl from 2006 -2012. Frances was President of the Institute of Physics between 2013-15 and is a Trustee of the Royal Academy of Engineering and the Engineering Development Trust.</p>	

Executive Board

The Executive Board, chaired by the Chief Executive, manages the day-to-day operations and activity of the UK Space Agency, including the provision of policy advice to BIS Ministers. The Board meets formally each week to make decisions and oversee high-level business planning, financial, risk and management issues. The Executive 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 cascaded to all staff which allows them to keep up to date with the important matters of the Agency.

David Parker left the Agency on 31 March 2016 to join ESA as the Director of Human Spaceflight and Robotic Exploration. Katherine Courtney was appointed interim Chief Executive by BIS on 1 April 2016 until 31 December 2016, pending a recruitment of a permanent replacement.

Executive Members of the UK Space Agency

<p>Katherine Courtney Interim Chief Executive</p>	<p>Appointed as interim Chief Executive on 1 April 2016 by BIS, Katherine is responsible for the UK's civil space policy, regulation and programmes. Katherine's early career was spent in the global telecoms industry as a senior executive with both multinational and start-up companies. Katherine moved to the public sector in 2003 and has joined the Agency from her role as Director of Enterprise at BIS.</p>	
<p>David Parker Chief Executive until 31 March 2016</p>	<p>Appointed Chief Executive in January 2013 following an open, competitive process, David led the UK Space Agency to manage the UK's civil space policy, regulation and programmes. David had worked for the UK Space Agency since its creation, following previous roles in both the private and public space sector.</p>	
<p>Dr Alice Bunn Director of Policy*</p>	<p>Alice joined the Agency in February 2012 and leads on security, regulation, statute, communications and international engagement to stimulate and drive growth and enable strategy delivery.</p> <p>* Alice was joined by Rebecca Evernden as a job share with effect from 6 June 2016.</p>	
<p>Dr Chris Castelli Director of Programmes</p>	<p>Chris joined the Agency in November 2011 and leads the Agency's involvement with ESA on space science, technology and exploratory missions and manages the Agency's national programmes.</p>	
<p>Peter Finn Chief Operating and Finance Officer and Security, Information and Risk Officer</p>	<p>Peter joined the Agency in February 2014 and is responsible for the UK Space Agency's operational, financial, risk and assurance, and HR.</p>	
<p>Catherine Mealing-Jones Director of Growth</p>	<p>Catherine joined the Agency in January 2012 and is responsible for the UK Space Agency strategy to continue to grow the UK space sector, drawing on the expertise of domain experts and acting as a sector sponsor to the UK space industry.</p>	

Governance statement continued

Board and Committee attendance 1 Apr 2015 - 31 Mar 2016

Board member /Board	Attendance / meetings eligible to attend		
	Steering Board	Audit Committee	Executive Board
Rob Douglas	4/4	-	-
David Southwood	6/6	-	-
Frances Saunders	5/6	4/5	-
Clive Tucker	5/6	5/5	-
Grazyna Kazmierska	-	4/5	-
David Parker	6/6	4/5	31/42
Peter Finn	5/6	5/5	35/42
Catherine Mealing-Jones	-	-	32/42
Alice Bunn	-	-	32/42
Chris Castelli	-	-	39/42

Internal control and support systems

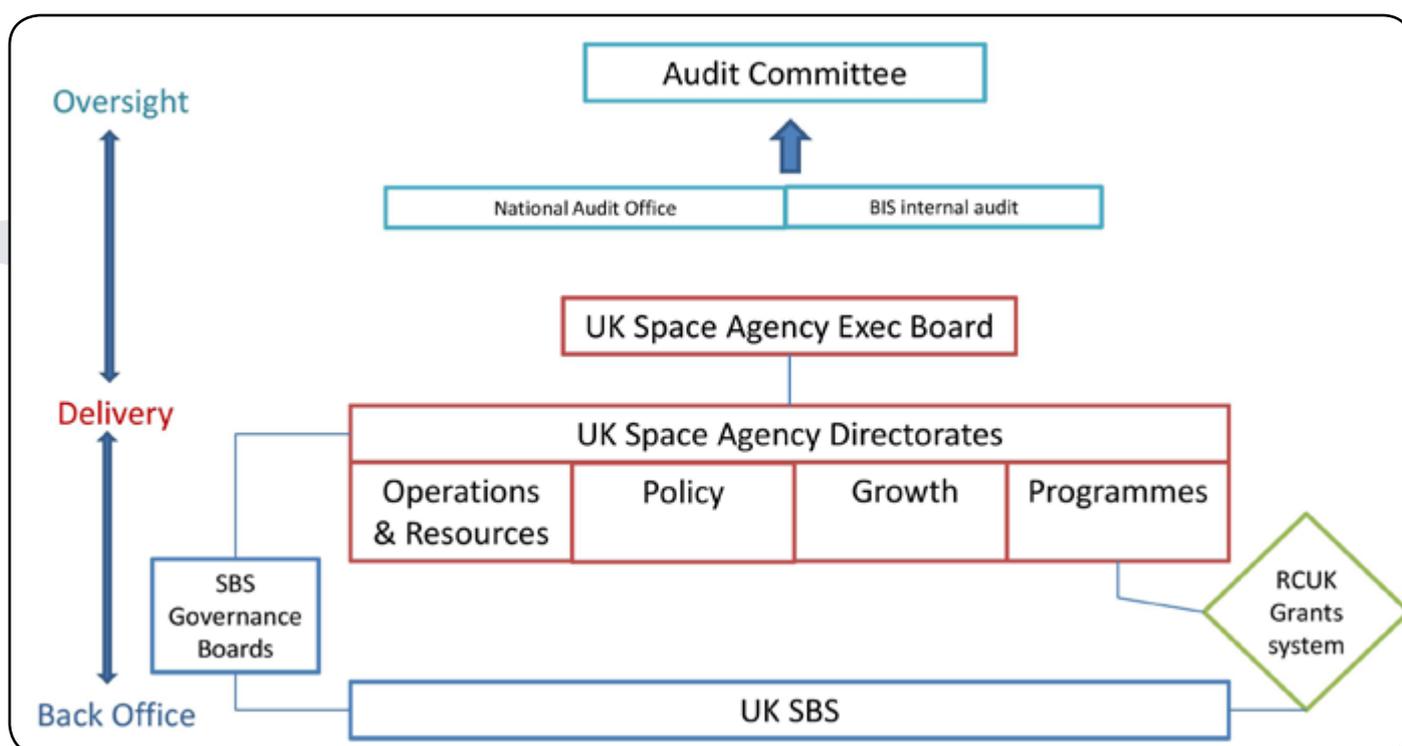
The system of internal control is a key component of our governance. It is designed to manage risk to a reasonable level rather than to eliminate all risks, and thus provides a reasonable but not absolute assurance of effectiveness.

The system of internal control is based on an ongoing process designed to:

- identify and prioritise the risks to the achievement of UK Space Agency policies, aims and objectives

- evaluate the likelihood and impact should the risks be realised
- manage the risks efficiently, effectively and economically.

The following diagram shows how our internal control and support systems interact:



Outsourced services

To support our business delivery, the UK Space Agency uses the BIS central services provider, UK SBS, to provide legal advice, HR support and ICT. Additionally, UK SBS provides strategic and operational procurement, administrative, finance and human resources transactional services. The assurance on the internal control for each of these services is provided by BIS.

The Government Internal Audit Agency (GIAA) was reappointed as UK SBS's internal auditor. The GIAA reports provide input to UK SBS Chief Executive's Quarterly Management Assurance update, which are the cornerstone of the assurance I receive regarding UK SBS. At the end of Q4 2015/16 the overall assurance status for the UK SBS has been assessed overall as amber, with 74% of internal controls assessed as green and 26% as amber.

During the year, UK SBS continued work to strengthen IT security and resilience. I am pleased to note that their Oracle 12.1.03 platform, which is used by the UK Space Agency, has established and successfully tested its disaster recovery procedures. UK SBS have also fully tested its business continuity plans and business impact assessments following an internal review. Its HR, payroll and finance functions have all been assessed as green in similar reviews.

As a result of the assurance provided by the UK SBS Chief Executive, I note that UK SBS has continued to deliver an adequate service while continuing to identify opportunities for improvements to its service delivery. I do, however, highlight UK SBS as an area of risk as shown in the Corporate Risk Register in the [Performance](#) section above. In particular, there remains a risk to the Agency of potentially inadequate service levels provided by UK SBS during their transition to a new service delivery model post BIS 2020.

Grant administration

Non-academic grant payments made via the National Programme are managed by the Agency through UK SBS. 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;
- a team of 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; and

- an independent annual audit of grant payments paid for by the grant recipient.

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 UK Space 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 UK Space Agency Accounting Officer, including the delegation of financial authority from BIS.

My review is informed by a range of key processes and documents including: the annual internal audit programme; the Agency's assurance framework; Director's Annual Assurance Statements of Internal Control; the Agency's risk appetite; and the NAO management letter.

DAASICs

Over the course of the year, the Agency has introduced a more structured approach towards capturing the evidence needed to support the Statement of Internal Controls in the form of Director's Annual Assurance Statements of Internal Control (DAASIC). The Agency's Directors self-assessed the effectiveness of internal controls within their area of responsibility with relevant narratives and justifications for given assurance levels. This review assisted in identifying areas with high assurance as well as areas for improvement.

The internal control assurance levels identified by the 2015/16 DAASIC exercise are shown in the table below. Each internal control has been given an assurance level based on that used by AASG, of either:

- substantial (a sound system of internal control likely to achieve the system objectives and which is operating effectively, coloured green);
- moderate (a basically sound system of internal control, but where there are a few weaknesses that may put achievement of some system objectives at risk but not considered to be sufficient to significantly undermine the general control environment, coloured yellow);

Governance statement continued

- limited (a system of internal control that is satisfactory in part, but which contains a number of weaknesses that are likely to undermine the achievement of system objectives and leave it vulnerable to material error / abuse or threatening risk, coloured amber); or
- unsatisfactory (a system of internal control containing fundamental weaknesses creating serious doubts over the achievement of system objectives and leaving it vulnerable to significant error / abuse, coloured red).

This review has assisted in identifying areas with high assurance demonstrating good practice, as well as areas for improvement, but did not identify any significant weaknesses. The areas given moderate assurance have helped us to inform our audit programme for 2016/17 and have also formed the basis for our action plan.

The common theme for moderate assurances can be attributed to an inconsistent approach to information dissemination to staff which, going forward, will be achieved by amending the Agency Staff Handbook. As this was the first year that DAASICs have been implemented, we recognise that more work is needed to fully embed the process and address inconsistencies identified this year. This will be a priority for the forthcoming year.

Assurance rating by Directorate

Internal control	Operations & Resources	Growth	Policy	Programmes
Financial control	Substantial	Substantial	Moderate	Substantial
Knowledge and information management	Moderate	Substantial	Moderate	Moderate
Human resources	Substantial	Moderate	Moderate	Moderate
Health and safety	Substantial	Moderate	Moderate	Moderate
Engaging with users / promotion of science	N/A	Substantial	Substantial	Substantial
Planning and performance	Moderate	Substantial	Moderate	Substantial
Awarding and managing grant funding	Moderate	Moderate	N/A	Substantial
External regulation and statute	Substantial	Moderate	Moderate	Moderate

Internal audit and assurance programme

The Director of the Audit and Assurance Service Group (AASG), the Agency's internal auditor, provides an annual internal audit opinion on the overall adequacy and effectiveness of the Agency's framework of governance, risk management and control.

Sufficient internal audit work has been undertaken during the year to allow the Director of Internal Audit to provide a positively stated (evidence-based) and reasonable (not absolute) assurance opinion on the overall accuracy and effectiveness of the Agency's system of internal control. The overall opinion for 2015/16 is 'moderate assurance' based on the results of the four individual audits completed in year. This is the same level of assurance as for the previous year. The Audit and Assurance Services Group (AASG) will join the Government Internal Audit Agency (GIAA) in October 2016. Details of audit remuneration received in 2015/16 can be found in [Note 4](#) to the accounts.

The internal audit review programme is managed by AASG, and developed annually in consultation with the Audit Committee and directors. The recommendations arising from these audits are discussed by the Executive Board, Audit Committee, and as appropriate by the Steering Board. A summary of the audit outcomes is provided below.

The audit outcomes show that some improvements are required to enhance effectiveness of the framework of governance, risks and control.

Cross client internal audits

Further to the core audits carried out by AASG, the Agency also participates in cross client internal audits as agreed in the annual review programme plan. Cross client internal audits are joint audits undertaken with the Research Councils by AASG. We will implement all remaining agreed recommendations in 2016/17.

Information security

The recommendations from the 2014/15 Security Health Check have been implemented this year. We have now completed the 2015/16 Security Health Check which has demonstrated improvements in our arrangements. Our responses have been peer checked and are currently being submitted to the Cabinet Office.

Most of the UK Space Agency's back-office support functions, such as IT, are provided by BIS and therefore the security of IT systems is managed by BIS. All new staff members have been required to undertake the mandatory 'Responsible for Information General User' training, which is also completed annually by all staff. In addition, the cyber security risk has been scrutinised at board-level. The UK Space Agency's Information Asset Owner manages data; their role is to understand what information is held, what information is added or removed and manage access permissions.

During the year, the Agency had one instance of a laptop being stolen from a hotel room. This was investigated and reported to BIS and no issues arising from the loss were identified. I am not aware of any breaches of personal data or IT security during the reporting period.

Audit	Date of audit closing meeting	Assurance level	Progress as at 31 March 2016
Risk Management	Jul 2015	Limited	Only one recommendation remains outstanding. Risk training will be delivered in 2016/17.
NovaSAR	Apr 2015	Moderate	All recommendations have been implemented.
Strategic Planning	Sept 2015	Moderate	The majority of actions have been implemented, the remaining action will be undertaken with the newly appointed Steering Board Chair.
HR Performance Management and Personal Development	Nov 2015	Limited	The final audit report was only received on 30 March; therefore the actions will be undertaken in 2016/17.

Governance statement continued

Fraud

The Agency's control environment is spread across three entities: the Agency finance team; UK SBS and BIS finance, this provides independent oversight in the prevention and detection of fraud. Any transactions that are deemed to be unusual would be flagged to the finance team. The Agency is also part of the BIS Group Counter Fraud Network. The network meets regularly to cascade latest learning, discuss current and emerging fraud trends and identify and share best practise. There were no instances of fraud identified within the Agency in 2015/16 and no instances of whistleblowing used by Agency staff. All staff are required to undertake the 'Counter Fraud' training annually and the UK Space Agency fraud policy was re-launched to all staff in October 2015.

Business continuity and disaster recovery

In addition to the cross-council and UK SBS business continuity and disaster recovery plan, the UK Space Agency has a business continuity management plan. This has been extensively updated in 2015/16 and a successful communications exercise undertaken with all staff.

Macpherson Review

UK Space Agency conducted an annual review of analytical modelling as advocated by the Macpherson review (2013), and did not identify any that were considered to be business critical. I confirm that the UK Space Agency complies with the requirements.

Alexander Review

I confirm that the UK Space Agency is compliant with the requirements of the Alexander Review (2012). The Agency's senior staff are paid through the payroll, and arrangements are in place to provide assurance that appropriate tax arrangements are in place to cover any other appointees covered by the report. Reliance is placed on the UK SBS assurance processes when new suppliers are set up.

Conclusion

As interim Chief Executive, I am satisfied that the Agency has appropriate levels of internal control and assurance necessary to manage the business, consistent with my responsibilities as the Accounting Officer. Equally, I am confident that the accounts for the year ended 31 March 2016 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.

I recognise that the Agency has a number of important assurance goals to achieve. My review has identified the following internal control improvements that the Agency will address during the next year:

- establish a culture of good research conduct in awarding and monitoring grant awards and review regularity of expenditure by organisations in receipt of grants from the Agency
- establish a programme of internal assurance to minimise reliance on third parties for the provision of assurance
- continue to strengthen the risk management discipline across the organisation
- develop a workforce plan which will incorporate an approach towards improved recruitment, retention and succession planning, especially with regard to specialist posts
- further mature the DAASIC evidence gathering approach across the Agency
- ensure robust scrutiny and governance of business cases produced in support of the government's agreed approach towards the ESA Council of Ministers 2016.



Katherine Courtney
Interim Chief Executive and Accounting Officer
27 June 2016



Senior Civil Service remuneration policy

Remuneration policy

The remuneration arrangements for Senior Civil Servants 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 on the website of the Office of Manpower Economics at www.ome.uk.com.

The remuneration packages of all Senior Civil Servants (SCS) within BIS are monitored by a Senior Oversight Committee which advises ministers on managing the balance between public sector pay restraint and ensuring the right quality of leadership and specific skills needed by its Partner Organisations is achieved. All Agency Executive board members are SCS.

Performance and reward

The SCS pay system consists of relative performance assessments. The highest performing individuals in BIS were awarded a non-consolidated performance reward for their performance against objectives in 2014/15 which was paid in 2015/16. These awards varied in amount within an overall cost envelope set by the Senior Salaries Review Body and approved by the Government. Consolidated base pay awards are limited to a 1% increase to the Department's SCS pay bill. No base pay increases were paid to those assessed to be the lowest 10% of performers or those receiving a salary in the upper quartile of their pay band other than those assessed as being among the top 25% 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 on the basis of 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, the Senior Civil Servants covered by this report hold appointments which are open-ended. 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:

www.civilservicecommission.org.uk

Remuneration policy for non-SCS employees

The remuneration policy adopted by the UK Space Agency is in line with the BIS departmental policy. The Agency's pay awards are limited to an average of 1% annual salary increase. Non-consolidated performance payments are awarded to the top 25% performers based on individual contributions to the Agency as formally assessed by the annual performance reviews.

The Agency runs Rewards and Recognition Scheme, which is a special bonus scheme for individual payments recommended by line managers and colleagues for specific projects or outstanding pieces of work that are not covered by the normal performance management system. These payments are non-consolidated and the maximum amount available for the Agency as a whole is capped to 0.6% of the total annual paybill (excluding SCS pay). A total of 37 awards were issued during 2015/16.

Audited information

Remuneration (including salary) and pension entitlements

The following tables provide details of the remuneration and pension interests of the Senior Civil Servants within the UK Space Agency.

Table 1: Remuneration of Senior Civil Servants

Name	Salary ⁽ⁱ⁾ in bands of £5,000		Performance rewards ⁽ⁱⁱ⁾ to nearest £1000		Benefits in kind to nearest £100		Pension benefits ⁽ⁱⁱⁱ⁾ to nearest £1,000		Single total figure of remuneration in bands of £5,000	
	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15
David Parker ^(iv)	90-95	90-95	-	-	-	-	30	20	120-125	110-115
Peter Finn	65-70	60-65	10	-	-	-	35	54	95-100	115-120
Catherine Mealing-Jones ^(v)	70-75	70-75	-	-	-	-	35	(10)	105-110	60-65
Chris Castelli	70-75	70-75	-	2	-	-	31	16	105-110	90-95
Alice Bunn ^(vi)	45-50	40-45	-	-	-	-	19	21	60-65	65-70

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. The 2014/15 comparators for David Parker and Alice Bunn have been restated by MyCSP due to retrospective adjustments made to their pension.

iv. David Parker left the Agency on 31 March 2016. Katherine Courtney was appointed interim Chief Executive with effect from 1 April 2016.

v. Catherine Mealing-Jones was on a 4-year loan from Home Office from 1 January 2012. She became a permanent member of staff with effect from 1 August 2015.

vi. Alice Bunn works on a part-time basis equating to 0.7 FTE. A full time equivalent annualised salary in 2015/16 would have been £65 - £70k (2014/15: £60k - £65k).

Salary

Salary includes gross salary; overtime; London weighting or allowances; recruitment and retention allowances; private office allowances; ex-gratis 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.

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.

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 2015/16 relate to performance in 2014/15 and the comparative bonuses reported for 2014/15 relate to performance in 2013/14. Bonuses are limited to the top 25% of performers within the Department.

Audited information continued

Single total figure of remuneration

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

	2015/16	2014/15
Band of highest paid Director's total remuneration ⁽ⁱ⁾	£90k - £95k	£90k - £95k
Median total remuneration ⁽ⁱⁱ⁾	£41,601	£40,100
Ratio	2.2	2.3

Notes:

- i. The highest paid director in 2015/16 was David Parker (2014/15: David Parker).
- ii. Remuneration is the total annual salary per employee as at 31 March 2016 and adjusted for full time equivalent.

The banded remuneration of the highest paid director in the Agency in the financial year 2015/16 was £90k - £95k (2014/15: £90k - £95k). This was 2.2 times (2014/15: 2.3) the median remuneration of the workforce, which was £41,601 (2013/14: £40,100).

In both 2015/16 and 2014/15, no employee received salary in excess of the highest paid director. Remuneration in the Agency ranged from £15,962 to £91,350 (2014/15: £15,528 to £90,750).

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 a new pension scheme for Civil Servants was introduced called alpha, which 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 that date, employees participated in the Principal Civil Service Pension Scheme (PCSPS). The PCSPS

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:

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.

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 3% and 8.05% of pensionable earnings for members of classic (and members of alpha who were

members of classic immediately before joining alpha) and between 4.6% and 8.05% for members of premium, classic plus, nuvos and all other members of 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 their pensionable earnings during their period of scheme membership. At the end of the scheme year (31 March) the member's earned pension account is credited with 2.3% of their pensionable earnings in that scheme year and the accrued pension is uprated in line with Pensions Increase legislation. Benefits in alpha build up in a similar way to nuvos, except that the accrual rate is 2.32%. In all cases members may opt to give up (commute) pension for a lump sum up to the limits set by the Finance Act 2004.

The partnership pension account is a stakeholder pension arrangement. The employer makes a basic contribution of

between 3% and 12.5% up to 30 September 2015 and 8% and 14.75% from 1 October 2015 (depending on the age of the member) into a stakeholder pension product chosen by the employee from a panel of providers. The employee does not have to contribute, but where they do make contributions, the employer will match these up to a limit of 3% of pensionable salary (in addition to the employer's basic contribution). Employers also contribute a further 0.8% of pensionable salary up to 30 September 2015 and 0.5% of pensionable salary from 1 October 2015 to cover the cost of centrally-provided risk benefit cover (death in service and ill health retirement).

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.

Further details about the Civil Service pension arrangements can be found at:

www.civilservicepensionscheme.org.uk

Table 2: Pension benefits of Senior Civil Servants

Name	Pension increase in real terms and (if applicable) related lump sum at retirement age in bands of £2,500	Accrued pension at retirement age as at 31/3/2016 and (if applicable) related lump sum in bands of £5,000	CETV ⁽ⁱⁱ⁾ at 31/3/2015 to the nearest £1,000	CETV at 31/3/2016 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
David Parker	0-2.5	15-20	268	327	21	-
Peter Finn	0-2.5 plus lump sum 0 - 2.5	25-30 plus lump sum 70-75	358	414	17	-
Catherine Mealing-Jones	0-2.5 plus lump sum 0-2.5	20-25 plus lump sum 65-70	346	399	18	-
Chris Castelli	0-2.5	5-10	55	80	16	-
Alice Bunn	0-2.5	15-20	144	169	6	-

Note:

i. The pension figures quoted show pension earned in PCSPS or alpha – as appropriate. Where the Senior Civil Servant has benefits in both the PCSPS and alpha the figure quoted is the combined value of their benefits in the two schemes.

ii. CETV at 31/3/2015 for David Parker and Alice Bunn has been restated by MyCSP due to retrospective adjustments made to their pension.

Audited information continued

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 BIS 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 BIS family of partner organisations, from 1 April 2013 the Agency’s non-executive members receive an honorarium of £6,000 per annum to cover work for the Agency. The Chair of the Steering Board receives an additional £2,000 honorarium per annum. Non-executive members are also reimbursed for any reasonable expenses incurred on behalf of the Agency.

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

Non- Executive Member	Position	Period of Appointment	Honoraria	
			2015/16 £000	2014/15 £000
Robert Douglas	Chairman	Nov 2011 - Nov 2015	5	8
David Southwood	Non-Executive	Nov 2011 - Oct 2016	6	6
Clive Tucker	Chair of Audit Committee	Dec 2014 - Nov 2017	6	2
Frances Saunders	Non-Executive	Dec 2014 - Nov 2017	6	2
Baljit Dhillon	Chair of Audit Committee	Nov 2011 - Nov 2014	not in post	4
Sally Cantello	Non-Executive	Nov 2011 - Nov 2014	not in post	4

Note:

i. From June 2015 Grazyna Kazmierska attends the Audit Committee as an independent BIS appointee. She is not remunerated for her work as honoraria are 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). The PCSPS is an unfunded multi-employer defined benefit scheme in which the UK Space Agency is unable to identify its share of the underlying assets and liabilities.

The PCSPS 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 at 31 March 2012 and determined that from 1 April 2015 the average employer contribution would increase to 21.1% of pensionable pay (18.9% up to 31 March 2015). The contribution rates are set to meet the cost of the benefits accruing during 2015/16 to be paid when the member retires, and not the benefits paid during this period to existing pensioners. More details can be found in the resource accounts of the Cabinet Office: Civil Superannuation (www.civilservice.gov.uk/pensions).

During 2015/16, employer contributions of £637,302 were payable to the PCSPS (2014/15: £463,373) at one of four rates in the range 20.0% to 24.5% of pensionable pay (2014/15: 16.7% to 24.3%), based on salary bands. There were no prepaid contributions at 31 March 2016.

Under the Partnership scheme employees have the option of opening a partnership pension account with one of three private sector providers. This is a stakeholder pension with employer contributions which are age related and from 1 October 2015 range from 8% to 14.75% of pensionable pay (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 pay (the maximum possible employer contribution therefore is 17.75%). During 2015/16, employer contributions of £1,356 were payable to partnership pension providers (2014/15: none). There were no prepaid contributions at 31 March 2016.

In addition, employer mini-ASLC contributions of £157 (2014/15: none), 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 PCSPS during 2015/16 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 (2014/15: one) retired early on ill-health grounds, therefore there were no additional pension liabilities accrued during the reporting period (2014/15: £5,083).

There were no redundancy or other departure costs paid during the year (2014/15: none).

Audited information continued

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

	2015/16			2014/15		
	Permanently employed £000	Other £000	Total £000	Permanently employed £000	Other £000	Total £000
Wages and salaries	2,986	-	2,986	2,375	-	2,375
Social security costs	266	-	266	214	-	214
Other pension costs	639	-	639	463	-	463
Subtotal	3,891	-	3,891	3,052	-	3,052
Add cost of inward secondments	-	65	65	-	141	141
Less recoveries in respect of outward secondments	-	(13)	(13)	-	-	-
Total staff costs	3,891	52	3,943	3,052	141	3,193
	FTE	FTE	FTE	FTE	FTE	FTE
Average number of persons employed	69.5 ⁽ⁱ⁾	1.4 ⁽ⁱⁱ⁾	70.9	56.4	1.8	58.2

Note:

i. On average there have been 0.75 FTE outward secondees (none in 2014/15) when UK Space Agency's staff have been seconded to other organisations.

ii. In addition to the 1.4 FTE inward secondees in the above table, the UK Space Agency also benefited from an average of 3.1 FTE inward secondees (6 FTE in 2014/15) provided at nil cost by other government organisations and industry as part of their staff development programme.

Unaudited information

Recruitment policies

Recruitment into the Civil Service is regulated by the Civil Service Commission (CSC). The Agency follows the CSC principles and ensures that appointments are made on merit after fair and open competition. The Agency also works closely with the parent Department to ensure these principles are adhered to.

In addition, the Agency adheres to the Government Interview Scheme (GIS), which ensures that any applicant with a disability is guaranteed an interview provided they meet the minimum criteria for the post.

In accordance with our people strategy published initially in October 2014, the Agency has continued to expand to meet the demands of work undertaken. As a result in 2015/16 the Agency recruited a total of 19 posts, three of which were internal candidates who have been promoted and one commencing on an apprenticeship scheme.

The Agency continues to abide by the principles of the external recruitment controls announced in May 2010. External recruitment (new entrants to Civil Service) is

only authorised by the parent Department where it is essential to support frontline delivery of services or there is a business critical need. Where external recruitment is necessary, a clear business case is required. In 2015/16, three external appointments were made.

The Agency's attrition rate remains low at 4% and we manage non-permanent posts through utilising fixed term contracts and loans from other government departments.

No consultancy costs have been incurred during 2015/16. The cost of contingent labour during the year was £44,214.

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 brought 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	2015/16 %	2014/15 %
Administrative assistants and Administrative officers ⁽ⁱ⁾	3.9	4.6
Executive officers	6.6	7.7
Higher executive officers and Senior executive officers ⁽ⁱⁱ⁾	38.9	35.3
Grade 7/ grade 6	44.4	45.2
Senior Civil Servants	6.2	7.2

Note:

i. Includes 2 apprentices as at 31 March 2016 and 1 apprentice as at 31 March 2015.

ii. Includes 1 Fast Streamer as at 31 March 2016 and 1 Fast Streamer as at 31 March 2015.

Gender	2015/16 %	2014/15 %
Male	44.0	43.0
Female	56.0	57.0

Unaudited information continued

Sickness absence

In the last 12 months, the average working days lost through recorded sickness absence was 8.3 days per employee staff year (2014/15: 7 days). Excluding long term absences, the average would be 2.5 days per employee staff year (2014/15: 1.5 days).

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 has 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.

Workforce diversity (all staff)	2015/16 (% declared)	2014/15 (% declared)
Black and minority ethnic	5.1	1.5
Women	56.0	57.0
Disabled	2.6	1.5

Workforce diversity (SCS only)	2015/16 (% declared)	2014/15 (% declared)
Black and minority ethnic	0	0
Women	40.0	40.0
Disabled	0	0

Working pattern	2015/16 %	2014/15 %
Full time	89.7	92.4
Part time	10.3	7.6

Агрегат 11Т11П1
Зав. № 30692511
Рег. № 126/РК
Отв. Абанин В.В.



Parliamentary accountability and audit report

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, one of its overseas territories or crown dependencies. It confers licensing and other powers on the Secretary of State for Business, Innovation and Skills acting through the UK Space Agency. In 2015/16 the total statutory licence fees collected by the Agency amounted to £6,500. More information can be found in Note 6 Income from operating activities on [page 73](#).

Losses and special payments

There were no 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 HMG against any proven third party costs. In March 2015 the Outer Space Act 1986 was amended to cap the previously unlimited liability for licensed activities. The cap is set at 60 million euro for the majority of 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 euro for the majority of missions) for the duration of the licensed 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.

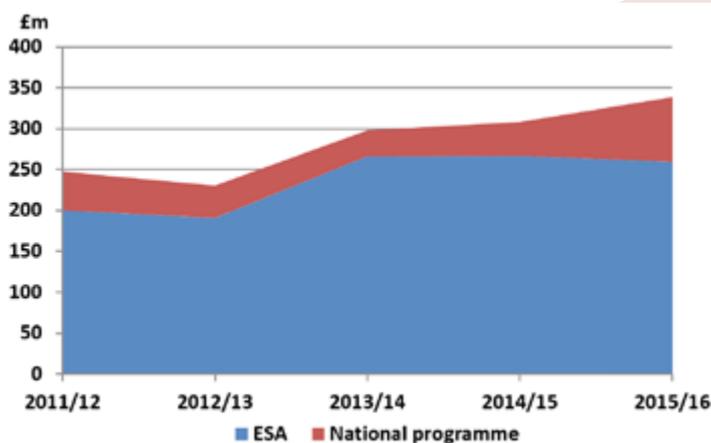
In 2013/14 the UK Space Agency entered into an operating lease with NATS (En Route) Plc for office accommodation. At the end of the lease term in December 2030 the Landlord has the contractual right to enforce the Agency to pay for costs of dilapidation. However, due to the

specialised nature of the asset, the expectation is that the Landlord will continue using the asset in its current state and therefore will not choose to exercise this option. In the event of the lease contract being terminated by the Landlord before the end of the lease term, UK Space Agency will be compensated. The likelihood of outflow of economic benefit is therefore assessed as not probable.

Long term expenditure trends

The UK Space Agency was created in April 2011, since then two successful Spending Reviews have led to significant increases in the annual DEL, which rose during the 5 year period from approximately £250m to £350m per financial year. In line with growth targets and the investment strategy, the Agency has used this funding to increase commitments in ESA programmes and to increase the size of the national programme, which has grown from £48m to £79m. Due to the nature of space science, the core of expenditure is managed across multi-year profiles.

ESA and national programme spend



Katherine Courtney
Interim Chief Executive and Accounting Officer
27 June 2016

The Certificate and Report of the Comptroller and Auditor General to the House of Commons

I certify that I have audited the financial statements of the UK Space Agency for the year ended 31 March 2016 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. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration and Staff Report and the Parliamentary Accountability Disclosures that is described in those reports and disclosures as having been audited.

Respective responsibilities of the Chief Executive and auditor

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. My responsibility is to audit, certify and report on the financial statements in accordance with the Government Resources and Accounts Act 2000. I conducted my audit in accordance with International Standards on Auditing (UK and Ireland). Those standards require me and my staff to comply with the Auditing Practices Board's Ethical Standards for Auditors.

Scope of the audit of the financial statements

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the UK Space Agency's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the UK Space Agency; and the overall presentation of the financial statements. In addition I read all the financial and non-financial information in the Performance Report and Accountability Report to identify material inconsistencies

with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by me in the course of performing the audit. If I become aware of any apparent material misstatements or inconsistencies I consider the implications for my certificate.

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

Opinion on regularity

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

Opinion on financial statements

In my opinion:

- the financial statements give a true and fair view of the state of the UK Space Agency's affairs as at 31 March 2016 and of the net operating cost 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 other matters

In my opinion:

- the parts of the Remuneration and Staff Report and the Parliamentary Accountability disclosures to be audited have been properly prepared in accordance with HM Treasury directions made under the Government Resources and Accounts Act 2000; and

- the information given in the Performance Report and Accountability Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

Matters on which I report by exception

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

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

Report

I have no observations to make on these financial statements.

Sir Amyas C E Morse
Comptroller and Auditor General
National Audit Office
157-197 Buckingham Palace Road
Victoria
London
SW1W 9SP

28 June 2016



The formal opening of ECSAT, July 2015 Credit: ESA

Financial statements

Statement of Comprehensive Net Expenditure for the year ended 31 March 2016

	Note	2015/16 £000	2014/15 £000
Income from operating activities	6	(398)	(331)
Total operating income		(398)	(331)
Staff costs	3	3,943	3,193
Programme costs	5	344,943	311,914
Administration costs	4	1,408	1,463
Total operating expenditure		350,294	316,570
Net operating expenditure		349,896	316,239
Other comprehensive net expenditure			
Items that may be reclassified to net operating costs:			
Net (gain)/loss on revaluation of cash flow hedges ⁽ⁱ⁾	7	(65,899)	25,859
Total comprehensive net expenditure for the year ended 31 March 2016		283,997	342,098

Note:

i. The reported gains on revaluation of forward exchange contracts are notional gains caused by an increase in the fair value of the contracts. The UK Space Agency abides by the HM Treasury and BIS group rules relating to hedging. More information can be found in Note 7 - Other financial assets and liabilities.

The notes on pages 65-79 form part of these financial statements.

Statement of Financial Position for the year ended 31 March 2016

	Note	31 March 2016 £000	31 March 2015 £000
Non-current assets			
Other financial assets	7	45,322	-
Total non-current assets		45,322	-
Current assets			
Trade and other receivables	8	41,336	41,124
Other financial assets	7	18,094	-
Cash and cash equivalents	9	1,965	3,318
Total current assets		61,395	44,442
Total assets		106,717	44,442
Current liabilities			
Trade and other payables	10	19,930	29,515
Other financial liabilities	7	-	22,855
Total current liabilities		19,930	52,370
Total assets less liabilities		86,787	(7,928)
Taxpayers' equity			
General fund		23,371	14,927
Revaluation reserve		63,416	(22,855)
Total taxpayers' equity		86,787	(7,928)

The notes on pages 65-79 form part of these financial statements.



Katherine Courtney

Interim Chief Executive and Accounting Officer

27 June 2016

Financial statements continued

Statement of Cash Flows for the year ended 31 March 2016

	Note	2015/16 £000	2014/15 £000
Cash flows from operating activities			
Net operating expenditure for the year		(349,896)	(316,239)
Adjustments for non cash transactions	4	40	39
(Increase) / decrease in trade and other receivables	8	(212)	(28,830)
Increase / (decrease) in trade payables	10	(9,585)	17,333
Net cash outflow from operating activities		(359,653)	(327,697)
Cash flows from financing activities			
Net parliamentary funding - drawn down		358,300	309,494
Net financing		358,300	309,494
Net increase / (decrease) in cash and cash equivalents in the period		(1,353)	(18,203)
Cash and cash equivalents at the beginning of the period	9	3,318	21,521
Cash and cash equivalents at the end of the period	9	1,965	3,318

The notes on pages 65-79 form part of these financial statements.

Statement of Changes in Taxpayers' Equity for the year ended 31 March 2016

2015/16	General fund ⁽ⁱ⁾ £000	Revaluation reserve ⁽ⁱⁱ⁾ £000	Total £000
Balance at 1 April 2015	14,927	(22,855)	(7,928)
Net parliamentary funding - drawn down	358,300	-	358,300
Net operating expenditure for the year	(349,896)	-	(349,896)
Non-cash adjustments:			
Non-cash charges - auditor's remuneration	40	-	40
Movements in reserves:			
Additions	-	(494)	(494)
Disposals	-	20,372	20,372
Revaluations	-	66,393	66,393
Balance at 31 March 2016	23,371	63,416	86,787

2014/15	General fund ⁽ⁱ⁾ £000	Revaluation reserve ⁽ⁱⁱ⁾ £000	Total £000
Balance at 1 April 2014	21,633	(1,875)	19,758
Net parliamentary funding - drawn down	309,494	-	309,494
Net operating expenditure for the year	(316,239)	-	(316,239)
Non-Cash adjustment:			
Non-cash charges - auditor's remuneration	39	-	39
Movements in reserves:			
Additions	-	(139)	(139)
Disposals	-	4,879	4,879
Revaluations	-	(25,720)	(25,720)
Balance at 31 March 2015	14,927	(22,855)	(7,928)

Notes:

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.

The notes on pages 65-79 form part of these financial statements.

Notes to the financial statements for the year ended 31 March 2016

1. Statement of Accounting Policies

1.1 Basis of accounting

These financial statements have been prepared in accordance with the 2015-16 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 UK Space Agency for the purpose of giving a true and fair view has been selected. The particular policies adopted by the UK Space 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 UK Space Agency is an Executive Agency of the Department for Business, Innovation and Skills and the Department's estimates and forward plans include provision for its 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 non-current assets and financial assets and financial liabilities.

1.4 Presentational currency

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

1.5 Non-current assets held for sale

Non-current assets are classified as held for sale if their carrying value amount will be recovered through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable, the asset is available for immediate sale in its present condition, management are committed to the sale, and completion is expected within one year from the date of classification.

Non-current assets held for sale are stated at the lower of the carrying amount and fair value less costs to sell.

1.6 Financial instruments

The UK Space Agency recognises and measures financial instruments in accordance with IAS 39 Financial Instruments: Recognition and Measurement as interpreted by the FReM.

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 UK Space 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 UK Space Agency has transferred substantially all the risks and rewards of ownership. Financial liabilities are de-recognised when the obligation is discharged, cancelled or expires.

1.7 Derivative financial instruments under IAS 39 Financial Instruments: Recognition and Measurement

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 IAS 39 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.

The UK Space Agency does not hold or issue derivative financial instruments for trading purposes.

1.7.1 Financial assets

The UK Space Agency classifies financial assets into the following categories:

- financial assets at fair value through Statement of Comprehensive Net Expenditure;
- held-to-maturity investments;
- loans and receivables;
- available-for-sale assets.

The classification depends on the purpose for which the financial asset is held or acquired. The UK Space Agency determines the classification of financial assets at initial recognition.

Gains and losses in fair value are recognised directly to equity except for impairment losses. Impairment losses are recognised in the Statement of Comprehensive Net Expenditure. On de-recognition, the cumulative gain or loss previously recognised in equity is recognised in the Statement of Comprehensive Net Expenditure.

1.7.2 Financial liabilities

The UK Space Agency classifies financial liabilities into the following categories:

- financial liabilities at fair value through Statement of Comprehensive Net Expenditure;
- other financial liabilities.

The classification depends on the purpose for which the financial liability is held or acquired. Management determines the classification of financial liabilities at initial recognition.

1.8 Operating income

Operating income is income that relates directly to the operating activities of the UK Space 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 and EU; and charges for services provided, on a full cost basis, to external customers.

1.9 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.

1.10 Ownership of equipment purchased by research grant

Equipment that has been purchased by an Institution with research grant funds supplied by the UK Space Agency belongs to that Institution. Through the Conditions of Grant applied to funded institutions, the UK Space 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.

1.11 Insurance

As an Executive Agency of the Department for Business, Innovation and Skills (BIS), the UK Space Agency, along with other public bodies of the Departmental group, do not generally insure. Insurance will only be obtained

1. Statement of Accounting Policies continued

on items which, with the agreement of the parent 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 BIS expenses policy guidelines.

1.12 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 hedge 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, except for those revaluations in relation to effective hedge contracts which remain in equity in accordance with IAS 39: Financial Instruments Recognition and Measurement.

1.13 Pensions

UK Space Agency staff are covered by the provisions of the Principal Civil Service Pension Schemes (PCSPS) as described in the Remuneration and Staff Report. Defined benefit schemes are unfunded. The UK Space 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 of amounts calculated on an accruing basis. Liability for payment of future benefits is a charge on the PCSPS. In respect of the defined contribution elements of the Schemes, the UK Space 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 in the financial statements of PCSPS at www.civilservice.gov.uk/pensions

1.14 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 2016 on an undiscounted basis.

1.15 Taxation

The UK Space Agency, as an Executive Agency of the Department for Business, Innovation and Skills, 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.

1.16 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.

1.17 Contingent liabilities

The UK Space 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, BIS, will fund this liability.

1.18 Reporting by operating segment

Under HM Treasury guidance in the FReM, the UK Space 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.

1.19 Estimation techniques used and key judgements

The preparation of the UK Space 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).

1.20 Changes to International Financial Reporting Standards (IFRS) and 2015/16 Financial Reporting Manual (FReM)

1.20.1 Changes to IFRS

In accordance with the FReM, these financial statements apply EU adopted IFRS and Interpretations in place as at 1 January 2015. The following new standards will be adopted by the Agency in full, when they are adopted by the FReM,

unless the requirements are interpreted or adapted by the FReM:

- * IFRS 9: Financial instruments, will replace IAS 39 Financial Instruments: Recognition and Measurement in its entirety. In July 2014 the International Accounting Standards Board (IASB) published the final version of the Standard, which introduced new classification and measurement requirements and a new hedge accounting model. The Standard will be effective for accounting periods beginning on or after 1 January 2018 (subject to EU adoption).
- * IFRS 16: Leases, will replace IAS 17 Leases and related 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 adapted in the 2019/20 FReM (subject to EU adoption and the Exposure Draft process). HM Treasury will issue an Exposure Draft in advance of the effective date. This Standard will have an effect on the financial statements of the UK Space Agency, but the full details are not known at the time of reporting.
- * IFRS 15: Revenue from Contracts with Customers, will replace IAS 18 Revenue. IFRS 15 was issued by IASB in May 2014, but was amended in September 2015 to defer the effective date to 1 January 2018 (subject to EU adoption). It is expected to be adopted in the 2018/19 FReM (subject to EU adoption and Exposure Draft process). HM Treasury will be issuing an Exposure Draft in the summer of 2016. The changes introduced in this Standard are not expected to have any effect on the financial statements of the UK Space Agency.

1.20.2 Changes to the FReM

During 2015/16, the Agency adopted IFRS 13 Fair Value Measurement in line with the 2015/16 FReM.

1.20.3 Other changes

With effect from 1 April 2016 the UK Space Agency, in line with other government organisations, will adopt spend classifications according to the European System of National and Regional Accounts 2010 (ESA10) methodology. ESA10 is the set of Eurostat rules that provide an internationally compatible EU accounting framework for a systematic and detailed description of an economy. As such, this change is not expected to have an impact on the financial statements.

2. Statement of operating costs by operating segment

The UK Space 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 UK Space Agency from BIS 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.

	National segment £000	2015/16 International segment £000	Total £000	National £000	2014/15 International £000	Total £000
Gross expenditure	89,346	260,948	350,294	48,890	267,680	316,570
Income	(6)	(392)	(398)	(52)	(279)	(331)
Net operating costs	89,340	260,556	349,896	48,838	267,401	316,239

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.

3. Staff costs

	2015/16 £000	2014/15 £000
Wages and salaries	2,986	2,375
Social security costs	266	214
Other pension costs	639	463
Subtotal	3,891	3,052
Add cost of inward secondments	65	141
Less recoveries in respect of outward secondments	(13)	-
Total staff costs	3,943	3,193

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

4. Other administration costs

	2015/16 £000	2014/15 £000
Travel and subsistence	472	488
Payments for departmental shared services ⁽ⁱ⁾	314	258
Accommodation	216	154
Training and other staff costs ⁽ⁱⁱ⁾	106	93
Media and design	64	90
Conferences and education	48	161
Temporary staff costs	44	2
Auditors remuneration (external)	40	39
Auditors remuneration (internal)	30	22
Board members honoraria and fees	23	26
Technical contracts and contract management	14	52
Rentals under operating leases	14	13
Telecommunications services	3	7
Consultancy	-	13
Legal costs	(18)	22
Other	38	23
Total	1,408	1,463

Notes:

i. Payments for departmental shared services include the costs for services such as information technology, HR, finance, security, specialist procurement and general overheads charges.

ii. In line with the Agency's continued commitment to provide personal development for all its staff, staff training costs of £45k (2014/15: £54k) were incurred during the reporting period. Other staff costs of £61k (2014/15: £39k) include expenditure relating to health and safety, staff welfare, security clearance, recruitment assessment services and movements in the holiday pay accrual.

5. Programme costs

	2015/16 £000	2014/15 £000
International subscriptions		
European Space Agency	259,795	269,987
Other international subscriptions	22	23
Net (gain) / loss on foreign exchange spot rate (non-hedge)	172	(3,142)
Other international grants and payments		
ESA mandatory tax adjustment ⁽ⁱ⁾	802	782
Other international grants	157	30
National grants and other funding		
National programme grants ⁽ⁱⁱ⁾	19,548	15,420
International Partnership Space Programme	18,704	7,048
Jason 3 / Jason CS	11,984	772
Spectrum charges ⁽ⁱⁱⁱ⁾	8,422	-
National Space Technology Programme	7,178	4,156
NovaSAR	4,628	5,637
Other national programme grants and funding	8,961	8,416
Total subscriptions, grants and other funding	340,373	309,129
Operational costs		
Technical contracts and contract management	3,690	2,164
Rentals under operating leases ^(iv)	452	448
Media and design	182	72
Travel and subsistence	60	14
Conferences and education ^(iv)	56	44
Legal costs	23	5
Other ^(v)	107	38
Total operational costs	4,570	2,785
Total programme costs	344,943	311,914

Notes:

i. UK Space 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 disclosed liability relates to tax of the recipients in the United Kingdom for the European Space Agency.

ii. Prior to the creation of the UK Space Agency the responsibility for provision of academic research grants was undertaken by the Science Technology and Facilities Council (STFC). 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 STFC have in this area it has been agreed that STFC 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 STFC has agreed to undertake this activity on a nil cost basis. Therefore there is no charge for this activity to the UK Space Agency.

iii. From 2015/16 the HM Treasury disaggregated charges on the usage of public sector spectrum used by government departments. The Agency's share of this charge is for public sector space science and earth observation spectrum. This charge is designed to encourage Departments to use spectrum more efficiently, and to release spectrum that is not essential to public sector as part of the Public Sector Spectrum Release Programme.

iv. In 2013/14 the Agency entered into an operating lease for office accommodation. See Note 14 Operating Leases for more information.

v. Other costs include an increase in holiday pay accrual of £23k (2014/15: -£17k), overseas detached duty costs of £21k (2014/15: £3k) and postage costs relating to Tim Peake outreach programme of £19k (2014/15: none).

6. Income from operating activities

	Note	2015/16 £000	2014/15 £000
European GNSS Agency rental income	14	282	279
EU SST Programme		110	-
Outer Space Act 1986 licence fees		6	52
Total		398	331

7. Other financial assets / liabilities

The UK Space 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 UK Space 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 BIS 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 BIS 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.

	2015/16 £000	2014/15 £000
Balance at 1 April 2015	(22,855)	(1,875)
Additions (new contracts entered into in year) ⁽ⁱ⁾	(494)	(139)
Disposals (contracts settled in year) ⁽ⁱⁱ⁾	20,372	4,879
Revaluation movement ⁽ⁱⁱⁱ⁾	66,393	(25,720)
Balance at 31 March 2016	(63,416)	(22,855)
Non-current (liabilities) / assets	45,322	-
Current (liabilities) / assets	18,094	(22,855)
Total	63,416	(22,855)

Notes:

i. During the reporting period, the UK Space Agency entered into 14 new forward exchange contracts for subscriptions payable up to 1 June 2020. The additions value represents the movement in fair value recognised at inception.

ii. The disposal value arose through the completion of three 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.

iii. Revaluation movement represents the difference in the fair value of the contracts still in place at 31 March 2016 and 31 March 2015. It also reflects initial and interim valuations on the contracts placed during the reporting period. The GBP to EUR forward rate moved on average from 1.37 to 1.23 during the year.

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 2014/15, these gains and losses are only recognised under the resource annually managed expenditure (RAME) budgetary category.

On acquisition and at the reporting date the hedges met the IAS 39 effectiveness criteria. The discounted cost of the contracts was compared with the discounted current market valuation, and both prospective and retrospective tests of effectiveness were within the 80% - 125% tolerance range.

At the start of the reporting period, the Agency held three forward exchange contracts, all of which matured during the year. The UK Space Agency entered into 14 new forward exchange contracts for subscriptions payable between 1 June 2016 and 1 June 2020. The total cost of these contracts was £736,657,447, and fair value as at 31 March 2016 was £800,073,629. There has been a positive movement on the revaluation reserve as at 31 March 2016 of £63,416,182.

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 31 March 2016 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.

7. Other financial assets / liabilities continued

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 UK Space 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, Innovation and Skills, 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 UK Space Agency is not exposed to liquidity risks.

Market risk

Foreign currency risk

The UK Space 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 UK Space Agency does not invest or access funds from commercial sources. The UK Space 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 UK Space Agency does not participate in any market reliant activities and is not subject to market risk.

8. Trade receivables and other current assets

Trade and other receivables less than one year	31 March 2016 £000	31 March 2015 £000
Trade receivables	70	1,872
Other receivables	15	25
Prepayments and accrued income ⁽ⁱ⁾	41,114	39,164
VAT	137	63
Total	41,336	41,124

Note:

i. Prepayments and accrued income include a prepayment made to the European Space Agency of £41,079k (2014/15: £39,105k).

9. Cash and cash equivalents

Cash and cash equivalents	31 March 2016 £000	31 March 2015 £000
Government banking service	1,965	3,318
Total	1,965	3,318

Note:

i. Included in the cash balance is £85,914 (2014/15: none) held on behalf of the Ministry of Defence, who are third party beneficiaries in the EU SST programme. This funding was received from EU.

10. Trade payables and other current liabilities

Trade and other payables less than one year	31 March 2016 £000	31 March 2015 £000
Trade payables	407	204
Other payables	265	288
Accruals and deferred income ^{(i) (ii)}	19,258	29,023
Total	19,930	29,515

Note:

i. Accruals include accrued expenditure in respect of the NovaSAR project of £4,750k (2014/15: £2,000k); International Partnership Space Programme of £4,398k (2014/15: £463k); and payments to the University of Cambridge of £1,933k (2014/15: none); European Space Agency of £659k (2014/15: £24,366k); and University of Leicester of £547k (2014/15: £636k).

ii. The UK Space Agency is the main UK beneficiary of an EU funded programme called EU SST. In 2015/16 the Agency received 65% of the first installment totalling £882k (2014/15: none), £772k of which was treated as deferred income.

11. Capital commitments

There were no capital commitments as at 31 March 2016 (2014/15: none).

12. Other financial commitments

The UK Space 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:

	2015/16 £000	2014/15 £000
Not later than one year	193,694	223,835
Later than one year and not later than five years	542,963	-
Total	736,657	223,835

13. Operating leases

13.1 Obligations under operating leases

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

Offices	2015/16 £000	2014/15 £000
Not later than one year	478	466
Later than one year and not later than five years	1,961	1,931
Later than five years	5,553	6,059
Total	7,992	8,456

Notes:

- i. In 2013/14 the UK Space 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 5 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 are reviewed annually in line with the movements in RPI. In 2015/16, the total lease payments charged to the Statement of Comprehensive Net Expenditure were £452,427. These charges were fully paid by 31 March 2016.
- ii. On 10 July 2014 the UK Space Agency entered into a short-term lease agreements with the Science and Technology Facilities Council (STFC) for office accommodation at the Electron Building (office No. 34) based within the Harwell Oxford campus for a lease term up to 31 March 2017 at the cost of £11,329 per annum, to be reviewed annually in line with the movements in RPI. In 2015/16, the total lease payments charged to the Statement of Comprehensive Net Expenditure were £13,875. At 31 March 2016 the quarter 4 payment of £3,468 remained outstanding and was accrued in these accounts.

13.2 Operating leases granted

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

Offices	2015/16 £000	2014/15 £000
Not later than one year	291	284
Later than one year and not later than five years	1,240	1,209
Later than five years	3,593	3,915
Total	5,124	5,408

Notes:

- i. In 2013/14 UK Space 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 2015/16, the total lease income charged to the Statement of Comprehensive Net Expenditure was £282,150.

14. Head office accommodation

The UK Space Agency operates out of the Research Councils' site in Swindon, which is owned by the Research Councils on a joint tenancy agreement. All relevant costs

are charged and recorded against operating costs as incurred. There are no capital commitments.

15. Related party transactions

During 2015/16, the UK Space Agency was an Executive Agency of the Department for Business, Innovation and Skills (BIS) and BIS 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 the Science and Technology Facilities Council which was also recognised as a related party.

The UK Space Agency also had various material transactions with other entities for which BIS is regarded as the parent Department, namely: Biotechnology and Biological Sciences Research Council, and Engineering and Physical Sciences Research Council.

In addition, the UK Space Agency made the following aggregated payments to third parties where Agency's staff and non-executive members are also senior members of staff:

Name	Position with related party	Description of transactions	Value of transactions £000
David Parker	Trustee for the National Space Centre	Programme expenditure	103
	Executive Director of the European Space Agency ⁽ⁱ⁾	Programme expenditure	103,962
David Southwood	Trustee for the National Space Centre	Programme expenditure	103

Note:
 i. On 24 November 2015 the European Space Agency (ESA) announced that David Parker was to be appointed the Executive Director of Human Spaceflight and Robotic Exploration. The value of transactions disclosed relate to planned payments of international subscriptions made by the Agency to ESA as normal business during the period between 25 November 2015 and 31 March 2016.

16. Events after the reporting period

In accordance with the requirements of IAS 10, Events After the Reporting Period, post Statement of Financial Position date events are considered up to the date on which the financial statements are authorised for issue, this is interpreted as the same date as the Certificate and Report of the Comptroller and Audit General.

The result of the EU referendum held on 23 June 2016 saw the United Kingdom's electorate vote to leave the

European Union. The UK Space Agency is assessing the impact of this decision, but at the date the financial statements were authorised for issue, the Agency had identified no material financial impacts to its accounts. No adjustment to the 2015/16 financial statements is therefore considered necessary but this situation will remain under close review and any material impacts subsequently identified will be reflected in future financial statements.



Making the UK the place for space

Government's National Space Policy has four interrelated policy headings which are expanded on below:

Strategic importance of space

Government recognises that space is of strategic importance to the UK because of the value that space programmes deliver back to public services, national security, science and innovation and the economy.

Credit: Met Office

Safety and security of space

Government commits to preserving and promoting the safety and security of the unique space operating environment, free from interference.

Credit: ESA

Growth of the space sector

Government supports the growth of a robust and competitive commercial space sector, underpinned by excellent academic research.

Credit: ESA

International cooperation

Government commits to cooperation internationally to create the legal frameworks for the responsible use of space and to collaborate with other nations to deliver maximum benefit from UK investment in space.

HC 226

An executive agency of the Department for Business, Innovation and Skills



Department
for Business
Innovation & Skills

UK SPACE AGENCY

Polaris House, North Star Avenue, Swindon, Wiltshire, SN2 1SZ
Tel +44(0)207 215 5000 Email info@ukspaceagency.bis.gsi.gov.uk
Web www.bis.gov.uk/ukspaceagency

ISBN 978-1-4741-3429-3

