



UK SPACE
AGENCY

UK Space Agency
Annual Report and Accounts
2014/15

UK Space Agency Annual Report and Accounts 2014/2015

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Chief Executive's Introduction

I am pleased to introduce our 2014/15 Annual Report and Accounts.

This has been another remarkable year for the UK space sector and the UK Space Agency continues to lie at the heart of the UK's civil space efforts. It is our duty to develop policy, regulate space activity and invest in satellite technologies and applications for the benefit of the whole of the UK. These responsibilities determine our day to day work.

A strong feature of the UK Space Agency's work over the past year has been a sharper focus on policy development. In April 2014, we jointly published the National Space Security Policy with the Cabinet Office, FCO and MoD to set out a coherent approach to the UK's space security interests. This was a strong demonstration of the Agency leading cross-government work. We seek to ensure our space infrastructure is safe and resilient and to operate a regulatory regime that strikes the right balance between delivering growth objectives and meeting our international security objectives. Thus, reform of the Outer Space Act (OSA) - to cap the currently unlimited liability on licensees - was included as part of the Deregulation Bill which gained Royal Assent in March 2015. This will reduce the burden on satellite operators, making the UK more competitive, particularly for launching and supplying small satellites. Our goal of growing the UK space economy requires us to work seamlessly at the local, national, European and global level with many partners.

This past year has been marked by the start of two key new programmes; the Space for Smarter Government Programme (SSGP) and the International Partnerships Space Programme (IPSP). The first of these is seizing the opportunity to make government a more confident and knowledgeable user of satellite data to support public policy and services, and is building new relationships with other government departments. IPSP, in contrast, sets out to build sustainable relationships between the UK and emerging users of space technology and services across the world. Both programmes have been welcomed by the community; and both have achieved early success such as addressing air transport safety in Africa and creating satellite-enabled mobile breast screening units.



David Parker

These user-driven initiatives perfectly complement our existing technology investments in national and European programmes. There have been multiple successes such as the launch of the first national cubesat, UKube-1 in July 2014 and the successful in orbit check-out and transfer to service of Alphasat, Europe's largest telecommunications satellite, launched in July 2013.

In our space science programme, we have continued to operate UK instruments on spacecraft such as the STEREO and Hinode solar physics missions. We have enabled exciting discoveries from astrophysics projects such as Herschel and Planck. And we have seen the billion-star astrometry mission GAIA start to generate its first data through the work of the Data Processing and Analysis Consortium at Cambridge University. We also delivered all the UK instrument hardware for the LISA Pathfinder fundamental physics mission to be launched later in 2015.

In this year of the 21st convention on climate change in

Paris, the UK Space Agency has continued to invest in vital missions such as Jason 3, Cryosat2 and EarthCARE which help us understand our changing planet. And to help us respond to natural disasters, we have led the UK participation in the International Charter on Space and Natural Disasters. The Charter is now activated somewhere in the world every week, notably as part of the response to the terrible earthquake in Nepal. The UK is a leading investor in ESA's Climate Change Office at Harwell near Oxford. Over half of the Essential Climate Variable mandated by the International Panel on Climate Change rely on global observations from satellites, and the Office is central to turning satellite data into knowledge for policy makers. We are always looking to the future. At the ESA Ministerial in December 2014 we pledged a multi-year investment of over £200 million in key commercial and scientific space programmes.

At the national level, the National Space Technology Programme's ladder of competitive grants sustains the flow of new commercial space technology. Breakthrough technologies include the Synergetic Air-Breathing Rocket Engine (SABRE) where we provide hands-on support and networking with stakeholders in the UK and beyond.

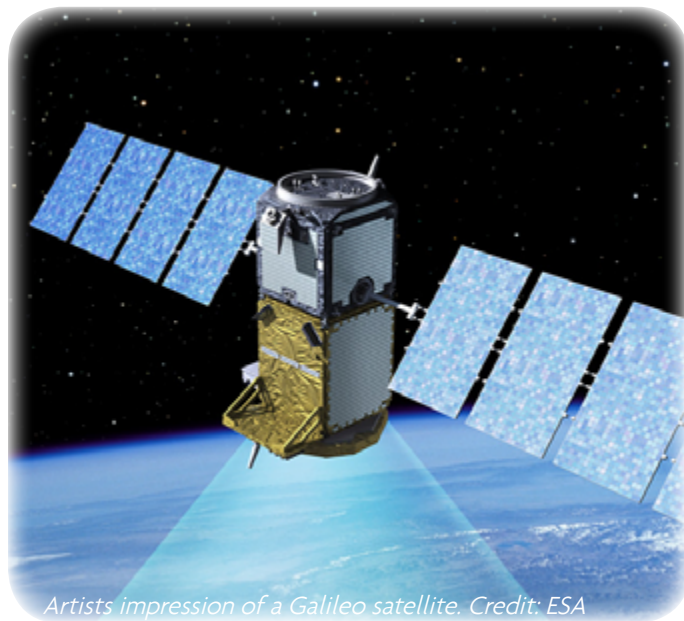
At the EU level, we have been influencing the Horizon 2020 space R&D programme to align its opportunities with UK goals, notably by being a partner in the new strategic research clusters for propulsion and robotics. UK industry is central to the EU's satellite navigation programmes, Galileo and EGNOS. Furthermore, work has now started on an international collaboration to improve Europe's ability to avoid collisions in space.

Recognising an ever increasing dependence on space enabled services, government is currently assessing the case for designating the space sector as Critical National Infrastructure. Without this infrastructure, cutting edge science and innovation cannot happen. As outlined in the Government's Science and Innovation Strategy, the UK government has committed £5.9 billion to support science capital from 2016 to 2021 which includes a long term commitment to space programmes. This funding shows continued confidence for science, research and innovation to support critical infrastructure.

Following the completion of our 'Arrow' change programme, our new organisation has become fully operational, led by a new management team and supported by a stronger staff complement which has increased in size by over a quarter. This is allowing us to address policy, growth and programme delivery

functions in a clearer and more coherent way matched with effective resource and performance management tools.

Our partnership approach to growth is reflected in the growing success of the UK Space Gateway at the Harwell Science and Innovation Campus. This is now a flourishing community of over 500 people in multiple businesses and R&D organisations. It is acting as a magnet for overseas investment and as a resource supporting local and regional growth.



Artists impression of a Galileo satellite. Credit: ESA

As you will see from this report the UK Space Agency is efficiently and effectively using public money to ensure the UK space sector grows and contributes to the UK economy. I am immensely proud of the commitment, expertise and professionalism of our staff, all of whom contribute to making the Agency the success that it is.

A handwritten signature in black ink, appearing to read "David Parker".

Dr David Parker
Chief Executive and Accounting Officer
23 June 2015

Highlights 2014/15

International Partnership Space Programme

The UK Space Agency opened the first round of a £32 million fund to help the UK space sector build stronger international partnerships. The programme supports UK companies in becoming trusted partners overseas, providing not only high-tech exports, but also improving the reach of our world-class science and services.



Local / regional growth programme

The UK Space Agency is working with the devolved administrations and more than ten Local Enterprise Partnerships around the UK to help them better understand their local space sector and capture the growth potential in space-enabled markets.

National Space Security Policy (NSSP)

The NSSP, published by the UK Space Agency in April 2014, sets out how we will ensure national access to space-based services, embrace opportunities which enhance our security and prosperity and make the UK more resilient to the risks of operating in space.



BepiColombo

BepiColombo is a joint ESA/Japanese mission to Mercury, the least explored terrestrial planet in our solar system. This year, the UK Mercury Imaging X-ray Spectrometer (MIXS) instrument was successfully tested and delivered to ESA.

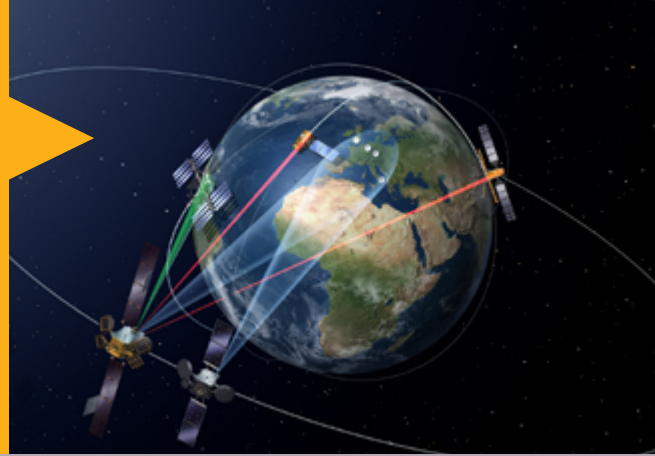


European Space Agency Council of Ministers 2014

In December 2014, the UK Space Agency pledged more than £200m, split between space projects that will deliver world-class science and innovation and stimulate growth in the UK space sector.

Advanced Research in Telecommunications Systems (ARTES)

ARTES is an ESA programme that invests alongside industry in de-risking technology for the largest global satellite market. The UK is now the strongest investor among European member states and the leadership of the programme is now based at ESA's centre in the UK. Thanks to past investments, all UK satellite broadcasting is via spacecraft substantially built in the UK and industry exports to customers world-wide.



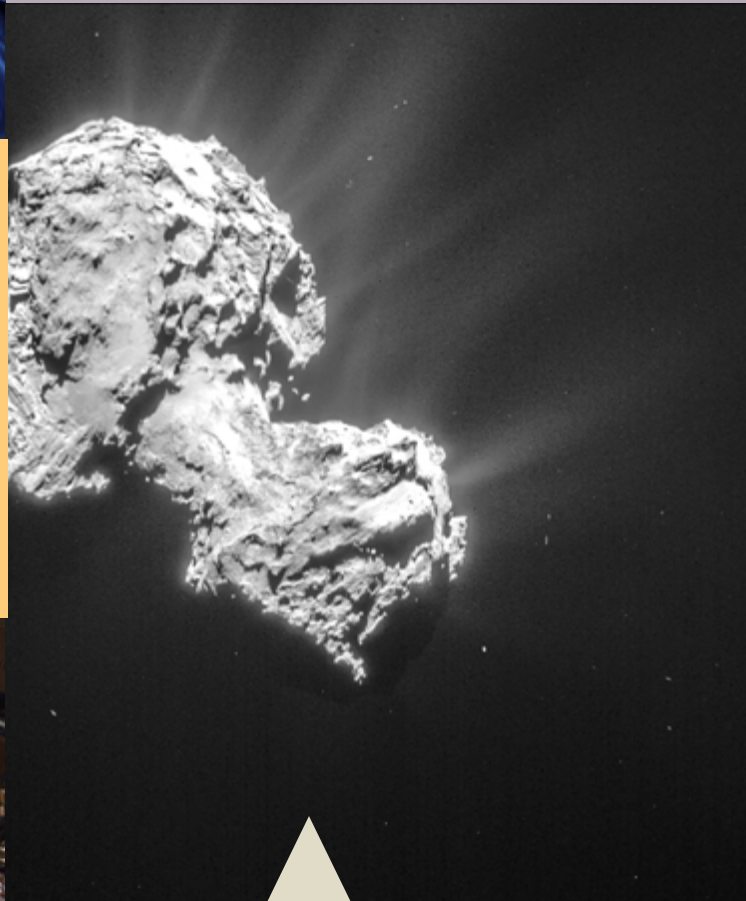
Farnborough International Airshow 2014

The Agency championed the UK space sector in the Space Zone at the Farnborough International Airshow 2014, hosting 16 UK industry exhibitors on the UK stand, supported by the European Space Agency and others. 16,000 visitors passed through the Space Zone over the week, including the UK Minister of Universities, Science and Cities, and Jean-Jacques Dordain, the Director General of ESA.



Space for smarter government (SSGP)

In 2014/15, the UK Space Agency launched the first round of the Space for Smarter Government Programme. Defra have become the first to announce their vision for satellite enabled services becoming operational across the department over the next five years. Many other departments and local authorities can now see the potential and are exploring their options.



Rosetta

In October 2014, ESA's Rosetta mission made history as the first mission to rendezvous and land on a comet. With funding from the UK Space Agency, Rosetta involved major contributions from UK industry and scientists. British universities are involved in ten of the 21 experiments that Rosetta carries aboard.



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.

Our 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 internationally. The pace of technology, market demand and business models are changing fast and our regulatory regime will 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 jobs by 2030 as the sector grows and satellite infrastructure extends to other sectors. 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 sectors' 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. Our staff include secondees from other organisations and industry. Together, we bring a wide range of skills and knowledge to bear on our work.

The year ahead

Looking forward to the next year (2015/16) we will be concentrating on five Key Performance Indicators (KPIs) which are detailed in the [2015/16 Corporate Plan](#):

- **Achieve the best value for money outcome for the UK Space Sector from the next Spending Review** - The Spending Review is an important opportunity for us to demonstrate the value and impact we bring to the UK achieving the ambitious growth targets set for the space sector.
- **Improve evidence on the value added of the UK Space Agency to the UK** – Having better evidence ensures that we more effectively deliver our policies and programmes to achieve our goals.
- **Implement the UK approach to Earth Observation (EO) from Space** – The UK Space Agency will drive the shared UK vision for EO from space with international leadership in development and use of EO- derived information and technology.
- **Exploit the education and inspiration value of the 'Principia' mission to the International Space Station** – To capitalise on the inspirational value of space to grow the skilled workforce on which the sector depends, we will be carrying out education and outreach activities associated with Tim Peake, Britain's first ESA astronaut, and his six month mission to the International Space Station starting in November 2015.

- **Efficient programme delivery at the local, national, European and global scale by collaborating with others** – The Agency will deliver a range of programmes and projects to benefit UK industry, academia and society working at the local, national, European and global scale.

As ever, development of our people remains a top priority. Over the coming year, as well as continuing to implement our people strategy, we will launch a learning and development strategy, and implement our staff engagement action plan. We will also recruit to fill remaining vacant posts.



Our performance

Each quarter the UK Space Agency reports on performance to the Executive and Steering Board by presenting detailed information on the KPIs, Balanced Scorecard and the Risk Register.

In the 2014/15 Corporate Plan, the Agency's work was broken down into six outcomes, shown in the table below. The outcomes ('the what') work in conjunction with the Civil Space Strategy's Pathways to Growth

('the how') as shown visually on [page 11](#). Grouped by the six outcomes, we detailed 72 KPIs which are representative of the breadth of the Agency's work carried out over the past year. The majority of the 72 KPIs were delivered successfully. A summary is shown in the table below with the Outcome measured on a Red/Amber/Green scale.

Outcome	Status	Progress
1. We will have clear and effective space policies and policy positions	Green	<ul style="list-style-type: none"> We pledged an extra £200m at the Council of Ministers 2014 for ESA projects to effectively exploit ESA membership Size and Health Survey completed and published as evidence to inform policy National Space Policy drafted but approval delayed to 2015/16 due to purdah
2. UK space policy and policy positions will be effectively represented at a national and international level	Green	<ul style="list-style-type: none"> Reform process was successfully added to the Deregulation Bill 15 OSA licences issued Action plan for establishing leadership in space-based climate services published Guidance on UK approach to CubeSat licensing reviewed, but delays in publication due to purdah
3. The UK will maintain and grow its national capability in space.	Green	<ul style="list-style-type: none"> Managed the top three priority actions from the space Innovation and Growth Strategy We have successfully collaborated with Local Enterprise Partnerships and devolved administrations to raise awareness of opportunities in space Education and outreach activities around Tim Peake have engaged and inspired hundreds of thousands of school children The National Careers Point of Contact is in place and progress towards the portal is ongoing Two trade missions with China and Japan in Q2 and Q3 supported our export agenda Ten international space companies have chosen to establish a presence in the UK The Space for Smarter Government Programme has been delivered successfully and funding will increase for its second year UK can now exploit access to Sentinel-1 data Spaceflight project office funding approved
4. UK investment in space will be effective, targeted and delivers tangible economic, societal or scientific benefit.	Amber	<ul style="list-style-type: none"> The Agency's projects remain broadly on track to deliver, however some projects are inherently high risk e.g. SABRE and ExoMars and are therefore categorised as amber. NovaSAR is recorded as amber whilst we await confirmation of its mission partner The UK Space Gateway at Harwell continues to grow strongly The International Partnership Space Programme has commenced, successfully selecting projects to fund Disaster Charter continues to operate effectively
5. The criticality and utility of the space sector to science, enterprise and economic growth will be increasingly understood by policy-makers, commerce, and the general public.	Green	<ul style="list-style-type: none"> Social media targets delivered Big Bang Fair and UK Farnborough International Airshow reached over 100,000 students and general public, showcasing the UK space sector offering
6. The UK Space Agency will have the capability, capacity and culture to deliver the Civil Space Strategy.	Green	<ul style="list-style-type: none"> Full senior leadership team in place Consolidated terms and conditions for staff Formal close of Arrow Programme Leadership development programme and People Strategy implemented

Our work



Working with others

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.

The Agency contributes directly to the government's wider agenda on Science and Innovation, and we work across the UK to support the broader government aims and priorities for growth and business. In addition to our close relationship with our parent department BIS, our partnerships with other government departments and non-departmental bodies continue to be very strong.

Our delivery relies critically on policy alignment across at least 13 different government departments and agencies. The National Space Security Policy, for example, is jointly owned by the Ministry of Defence (MoD), Foreign and Commonwealth Office (FCO), the Home Office and the UK Space Agency (see case study on [page 18](#)).

We have continued to work with UK Trade and Investment (UKTI) and the UK's global Science and Innovation Network (SIN) to help the space industry export UK capability and attract inward investment (see case study on [page 27](#)). We also partner with Innovate UK to manage the ARTES programme.

Without UK investment in ESA research and development programmes, the Met Office would not have been able to move to three day forecasts – a measure that has been estimated by the Met Office to have saved the UK economy £2.4bn. (Upcoming Met Office Report 2015)

We also work with government partners to assure the resilience of our space infrastructure, an important step in increasing uptake of space-enabled services and delivering growth (see the National Space Security Policy case study for more detail).

Throughout 2014/15, the UK Space Agency has supported the objective of the Space Innovation and Growth Strategy (IGS) to capture 10% of the world space economy for the UK by 2030. Almost a third of the Agency's workforce is now engaged in activities helping to deliver agreed IGS priorities. The Agency also plays an active part as a member of the IGS Leadership Group. The IGS is moving from strength to strength with the recent agreement for the Implementation Team to be expanded to include a full time Project Director and team.

Working with others continued

European collaboration

The UK Space Agency continues to expand its reach and engagement with partner agencies across Europe, not only through the European Space Agency and Commission, but also bilaterally.

In 2014/15, 84% of UK Space Agency funds were committed to programmes within the European Space Agency’s collaborative framework. Our work within ESA remains critical to enabling UK industry and academia to work in collaboration with institutions and colleagues across Europe, developing new technologies and services, while still inspiring science missions.

ESA’s programme of activities is overseen by an intergovernmental council and subordinate programme bodies; each of which has a formal delegate from the ESA member states. The Chief Executive of the UK Space Agency is the lead UK delegate to ESA Council. Various bodies oversee ESA programmes and make decisions on funding and programme changes that are binding on the ESA executive.

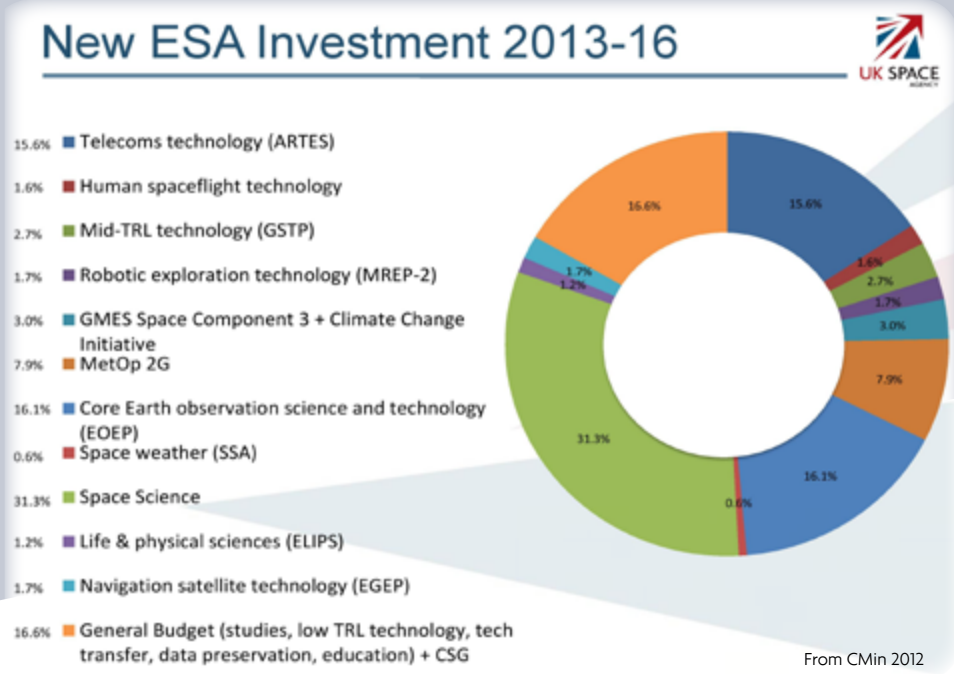
Our involvement in ESA and the associated investment in our national programme is the foundation of the UK’s efforts in space. For example:

- The UK Space Agency matches investment from industry in ESA’s ARTES programme which will develop the next generation of commercial telecoms satellites, applications and supporting infrastructure;
- The UK’s 20-year involvement in the Rosetta comet rendezvous mission delivered British science, technology and inspiration with global impact – scientists from the Open University led a key instrument on the Philae lander in this ground-breaking mission to Comet 67P;
- Tim Peake’s six-month mission to the International Space Station will provide real scientific benefit to UK researchers and inspire the next generation of STEM careers;
- ESA’s General Support Technology Programme (GSTP) converts promising engineering concepts

into a broad spectrum of mature products. The UK Space Agency, together with investment from industry and ESA’s GSTP management is working to deliver innovative programmes such as harpoons for active debris removal in space, novel propellant tank manufacture and in-orbit manufacture of very long booms.

The UK receives a proportionate return to its universities and companies for every Euro it allocates to ESA programmes. However the value of being part of ESA is often much greater, particularly where contracts are competitively led. For example, the UK undertakes about £3mpa research with ESA into the Global Navigation Satellite System systems supporting the EU funded Galileo programme. This will have helped UK companies to win over €700m worth of Galileo contracts (or over 20% of the total) between 2007 and 2013.

The European Union’s involvement in space continues to strengthen. The UK Space Agency is active in ensuring that EU funding is used in line with UK objectives and ensuring that UK companies and institutions can compete fairly for opportunities. The Agency holds the Commission to account for the management of the EU space programmes and when discussing new European legislation, the Agency leads the negotiations on behalf of the UK. The process for procuring a new operator for the EU’s Global Navigation Satellite System (Galileo) has started. The contract is likely to be valued at approximately €1bn over ten years and offers an opportunity for UK industry to be at the heart of the Galileo programme.



The UK Space Agency, as well as engaging UK industry on this opportunity, has used its influence to ensure a fair competition and a promotion of innovation. More broadly, our strong, coordinated involvement in the Galileo Programme has resulted in UK industry winning a significant proportion of the business opportunities offered by the Galileo Programme.

International collaboration

The cost, complexity and duration of space activities lend themselves well to international collaboration. The UK currently has 18 Memoranda of Understanding (MoU) with international space agencies including USA, France, Nigeria and Algeria. We continue to explore new avenues of cooperation with new partners around the world, including Brazil, Indonesia, Iraq, South Africa and Taiwan.

Late 2014 saw the launch of the International Partnership Space Programme, bringing together UK industry and international partners for the delivery of programmes using British expertise in satellite technology and data. For more information on IPSP, please see the case study on [page 27](#) and [28](#).

The UK Space Agency is investing £2.5m to support a UK consortium to develop a microseismometer (SEIS-SP) for NASA's InSight mission lander. The UK team at Imperial and Oxford Universities have delivered both qualification and flight models this year.

Following signing of the Framework Agreement with the French Space Agency (CNES) in January 2014, two projects are underway. The next generation Infrared Atmospheric Sounding Interferometer (IASI) instrument which will form part of future EUMETSAT weather satellites and will increase forecasting accuracy, while the UK contribution to the France-US Surface Water Oceanographic Topography (SWOT) mission to conduct the first global survey to measure changes in Earth's surface water bodies has already been delivered. Launches in 2018 and 2020 respectively are planned. European collaboration was further strengthened by the signing of an MoU with the Italian Space Agency (ASI) in December 2014. The cooperation agreement has facilitated access to data from the COSMO-SkyMed radar constellation for the UK research community in exchange for future NovaSAR data for use by the Italian research community.

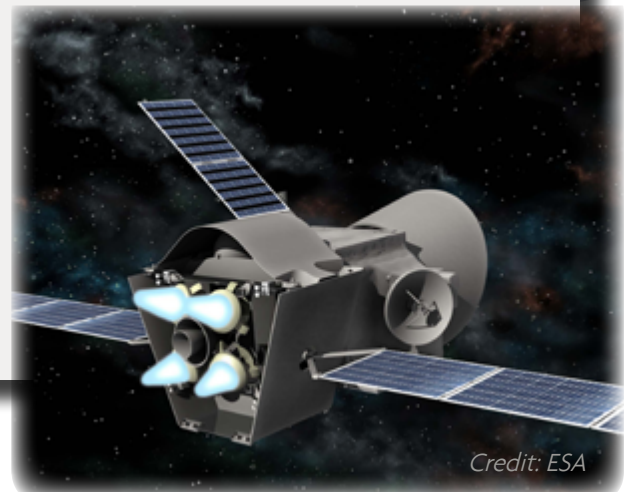
Bepi Colombo, international collaboration

BepiColombo is an ESA mission to Mercury, the closest planet to our Sun and the least explored terrestrial planet in our solar system. It will be a joint two spacecraft mission with Japan and ESA each providing one craft to be launched together in 2017.

Leicester University is leading the development of MIXS an imaging X-ray spectrometer, which will map Mercury's geochemistry. MIXS has a close relationship with the Finnish led SIXS spectrometer and the Science and Technology Facilities Council (STFC) Rutherford Appleton Laboratory has contributed to SIXS instrumentation. The instruments have undergone rigorous testing and development this year and are ready to endure the harsh environment at Mercury; the flight models will be delivered to ESA in Q1 2015/16.

UK industry is providing the spacecraft structures and propulsion systems as well as the remote interface units providing data and telemetry to drive and control the spacecraft thrusters.

Much of the spacecraft has been built by UK industry. The UK's involvement in BepiColombo is funded by the UK Space Agency.



Credit: ESA

Working with others continued

Working at the local and regional level

The targeted growth of the UK space sector must result in hundreds of new space companies being created, from start-ups to corporates, both home-grown and from inward investment.

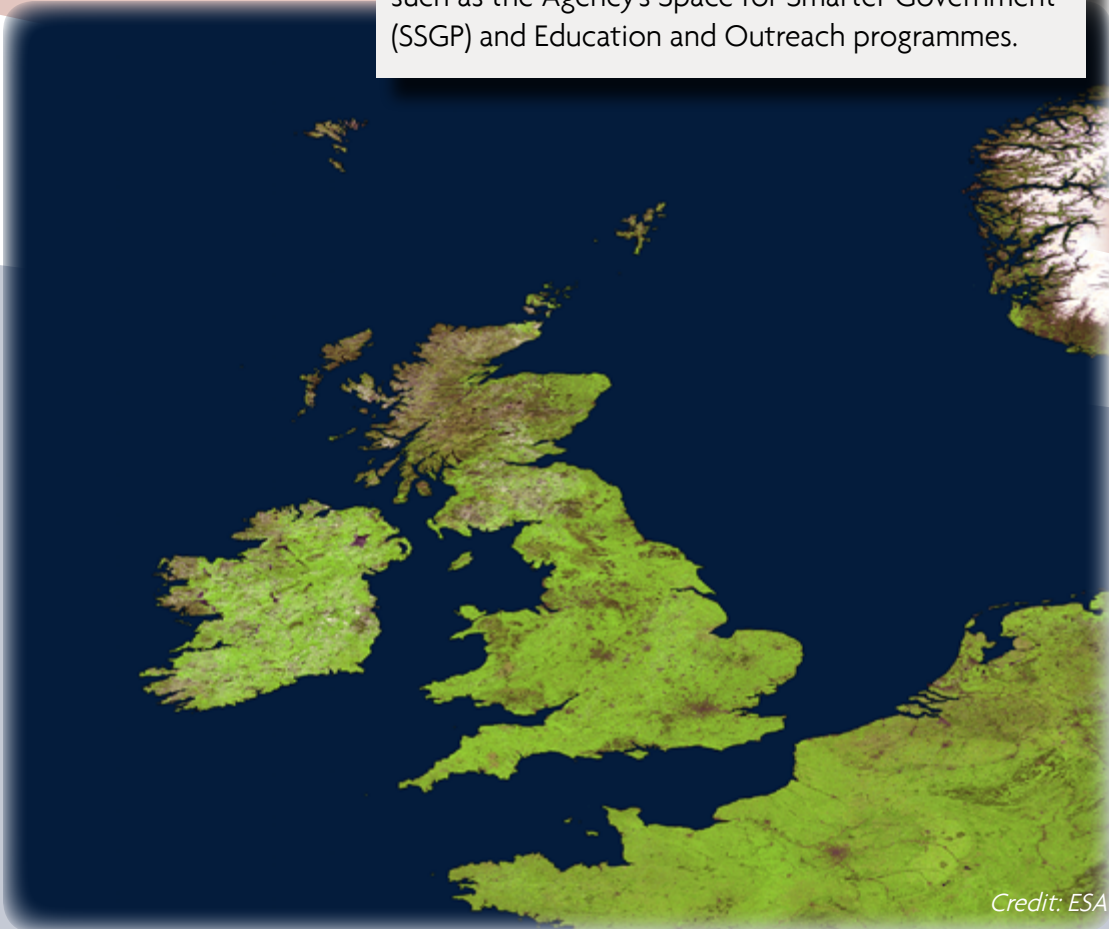
Having recognised the role that regional support could play in identifying and supporting these new space companies, in 2014/15 the UK Space Agency has worked with all three devolved administrations and more than ten LEPs to help them to better understand their local space sector. Activities have included:

- a collaboration with the Satellite Applications Catapult to provide dedicated resources ‘on the ground’ to develop local networks, broker relationships and join up local and national support;
- work to develop a stronger evidence base of subnational opportunities and strengths;
- activities to significantly increase business incubation support for start-up businesses.

This year we have also worked with regional partners to raise awareness of the importance of space to the supply chain across the UK. We are developing strong relations with partners in Scotland and with the Welsh government to actively support their work to identify and capitalise upon strengths in industry and academia.

Northern Ireland, working at the local and regional level

In Northern Ireland, the Agency has helped to support further developments of the space upstream cluster. There are now 32 companies/ institutions registered with the Northern Ireland Space Special Interest Group, actively pursuing space engagement opportunities. The Agency and Satellite Applications Catapult are galvanising a spread of downstream activities in the region, including the identification of Northern Ireland Remote Sensing capabilities, development of a cluster with existing UK capabilities at the UK Space Gateway in Harwell, and deepening local engagement with activities such as the Agency’s Space for Smarter Government (SSGP) and Education and Outreach programmes.



Credit: ESA

Policy work

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

The UK Space Agency is the 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 government and 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.

The UK Space Agency, as regulator of space activities, must keep pace with fast changes in technology, market demand and business models to deliver a regulation regime for our space programmes that is proportionate, adheres to international and security obligations, and meets our long-term targets for growth. These often-competing objectives must be considered by a single agency in order to arrive at a balanced regulatory regime and policy framework.

Examples of our intervention to make the UK the best place for space over the last 12 months include:

- Removing an Insurance Premium Tax for satellites because this was undermining UK competitiveness for international business;
- The Agency has capped space operators unlimited liability at €60m, recognising that this balances risk to government arising from UK space activity with optimising the opportunities for business growth;
- Working at the European and international level to secure an improved space monitoring capability, since a safe operating environment is essential for our growth ambitions;
- Producing clear and accessible guidance to support new entrants to the UK space sector, recognising the global shift towards faster development of smaller, and cheaper spacecraft;
- Leading on the international governance of space activities within relevant United Nations fora, and other initiatives such as the International Code of Conduct; with the aim of promoting the safe, secure and sustainable use of space;
- Supporting sector access to spectrum, as part of the wider government drive to secure greatest benefit from this finite resource;

- Defining export controls which enable UK industry access to new markets whilst meeting national security considerations.

European policy

The Agency leads on discussions in the European Union on behalf of the UK in the development of new policy initiatives, legislation and the implementation of key funding programmes.



In 2014/15 the Agency discussed proposals for a new EU law that would regulate at a European level how governments control the sale of Earth observation data. UK industry continued to build core elements of the space and ground segment of the Galileo and Copernicus projects. The Agency secured an agreement to gain access in the UK to sentinel satellite data in order to boost downstream exploitation of this EU programme. Another important Agency activity during the last year was to ensure that UK companies could compete fairly for work to build or operate EU space projects. UK companies do well in open competition, securing significantly more contracts in Galileo for example than the UK nominal contribution to a programme. The Agency also influenced early developmental work on a number of other space initiatives that the Commission is exploring such as bespoke EU procurement rules for the space sector.

Policy work continued

Outer Space Act licensing

The Agency acts on behalf of the Secretary of State to grant licences under the Outer Space Act 1986 to launch or operate a space object. A rigorous series of assessments are made to help ensure that the proposed activity does not pose risks to public health and safety or to UK national security.

The licensing process also allows government to offset some of the unlimited liability that falls to UK taxpayers through the requirement on licensees to obtain third party liability insurance.

This year demand for Outer Space Act licences remained strong with 15 issued and nine applications on-going. Every licence was issued in advance of the anticipated launch date.

National Space Security Policy Nssp

Over the last 12 months the Agency has fully met its objective to co-ordinate the implementation of the UK's Nssp across government. This has ensured that the key priorities for future implementation have been agreed between the UK Space Agency, the Ministry of Defence, Foreign & Commonwealth Office and the Home Office. The National Space Security Policy was published in April 2014 and can be found [here](#). It sets out how we will ensure our national access to space-based services, enhance our security and make the UK more resilient to the risks of operating in space.

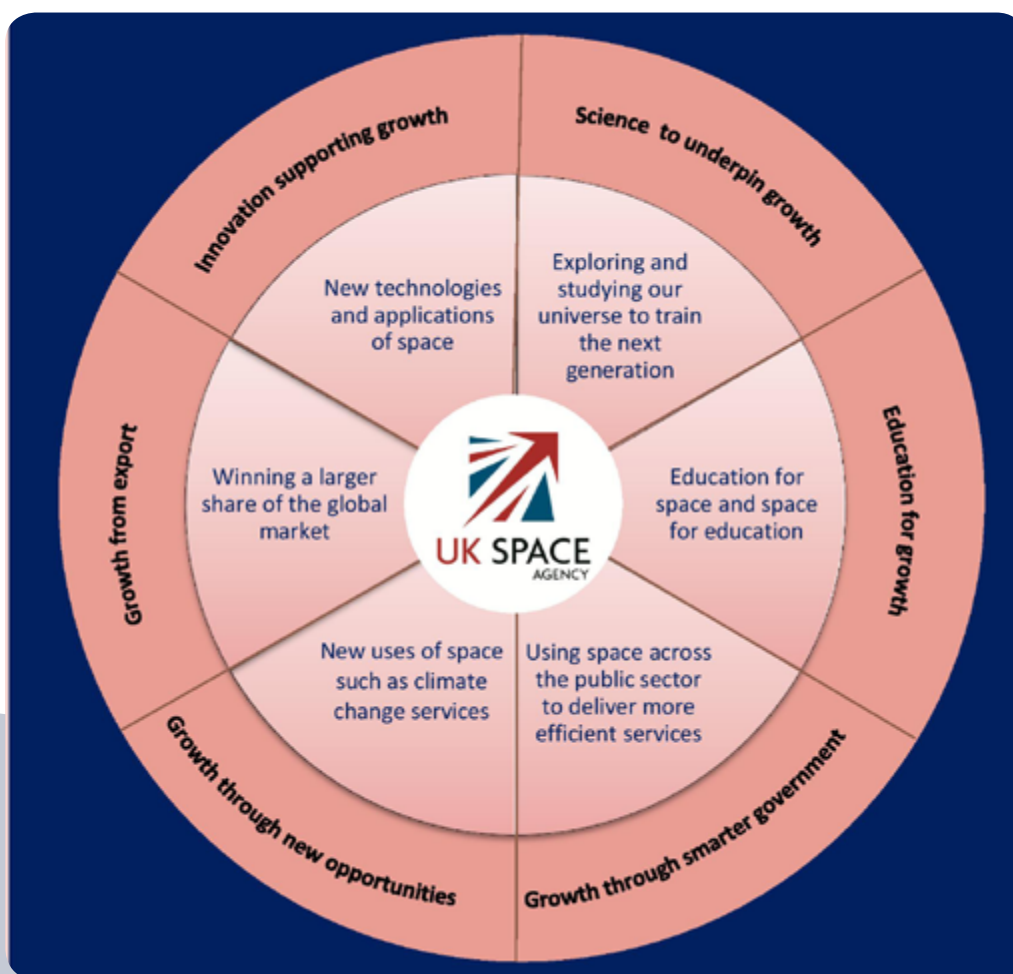


Smart cities are critically dependent on the space infrastructure that the Nssp assures

Six pathways to growth

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 2014/15 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 Space Agency continues to invest and support the development of new infrastructure and technologies that will keep the UK space sector competitive in the global market. Innovative ideas will bring new benefits to the commercial sector. For example from the ExoMars programme, spin-offs are happening such as robotic buggies for airports, software architecture for use on UK lifeboats and armoured vehicles, and the cleaner extraction of petroleum from rocks.

The ability to engage companies currently operating in the high growth potential markets enabled by space, as identified in the space industry's [Growth Action Plan](#), will be crucial. The Agency can help raise awareness of the opportunities to develop new or improved products or services based upon space-derived data or technology.

The ESA Business Incubation Centre (BIC) Harwell provides a comprehensive business package that supports start-ups using space technology in non-space applications.

Since opening in 2011, BIC Harwell has incubated 41 companies with 39 still in operation and continues to enjoy a steady rate of applicants with 50% success through the selection process. This year ten applicants were selected.

The aim of the National Space Technology Programme (NSTP) is to complement existing funding streams to progress products up the technology readiness ladder, positioning them for ESA funding or commercial exploitation. A review published in November 2014 found that NSTP had met all its original objectives, raising Technology Readiness Levels (TRL) by one, to four. As a result, companies have secured strong roles in key ESA programmes. New partnerships have been forged which have particularly helped small and medium enterprises to capture new business and give them insight into ESA and prime contractors for future requirements.

Public Regulated Service (PRS) pilot scheme

The PRS is an encrypted navigation service designed to be more resistant to 'jamming', involuntary interference and 'spoofing'.

Early estimates suggest the European market for global navigation satellite system (GNSS) receiver sales ranges from €4-7bn over the next 12 to 15 years. Based on this analysis, the UK Space Agency and Innovate UK have jointly invested £7m over the last three years in a national programme designed to open encrypted satellite navigation signals to the wider market.

Tasked with developing a range of innovative technology platforms capable of supporting a number of downstream applications, the Agency's PRS Programme culminates in demonstrations designed to illustrate industrial strength across all aspects of PRS and how the necessary platforms interoperate to meet a breadth of user needs.

The technology developed under the Programme is currently proven in lab environments. Future efforts will focus on identifying and engaging test users, both domestic and international, in order to capture real-world requirements and secure collaborative funding to develop downstream applications, bringing the programme closer to market. The Agency is also working in parallel to develop a scalable national infrastructure capable of meeting the needs of a growing PRS user community.

The UK Space Agency's PRS programme has secured a clear market advantage for UK industry, demonstrating strategic leadership for the sector in the field of PRS. Coupled with the size of the potential market, this plays powerfully into the Agency's IGS mandate to deliver a space sector worth £40bn by 2030. The PRS market seems to be one of the greatest untapped downstream opportunities, therefore future phases of the programme are being planned to maximise on the successes to date.

UKube-1

On 7 July 2014 the UK Space Agency's first national CubeSat mission, Ukube-1, launched from the Baikonur Cosmodrome, Kazakhstan on a Russian Soyuz 2 rocket.

The miniature spacecraft was designed and built by Scottish company Clyde Space Ltd, with on-board software developed by Bright Ascension Ltd. Both companies have declared that their engagement with Ukube-1 has brought additional business to their companies, with Clyde Space reporting a 100% increase in turnover directly attributable to their involvement.

The suite of innovative payloads was selected by the UK Space Agency in an open competition and includes an experiment to measure space weather effects in the ionosphere with the aim of reducing degradation of

GPS signals, designed and built by a PhD student at Bath University. There is also a digital camera designed by the Open University to flight-test a new CMOS imaging sensor from e2v Ltd, and an ADS Ltd experiment to demonstrate the feasibility of using cosmic ray hits to improve security for satellite communication systems.

In addition, Ukube-1 is flying an educational 'FUNcube' package, designed by AMSAT to allow school children to download data from the spacecraft in near real time and use it to design classroom experiments. The Ground Segment is managed on behalf of the UK Space Agency by STFC's Rutherford Appleton Laboratory at its Chilbolton Observatory.

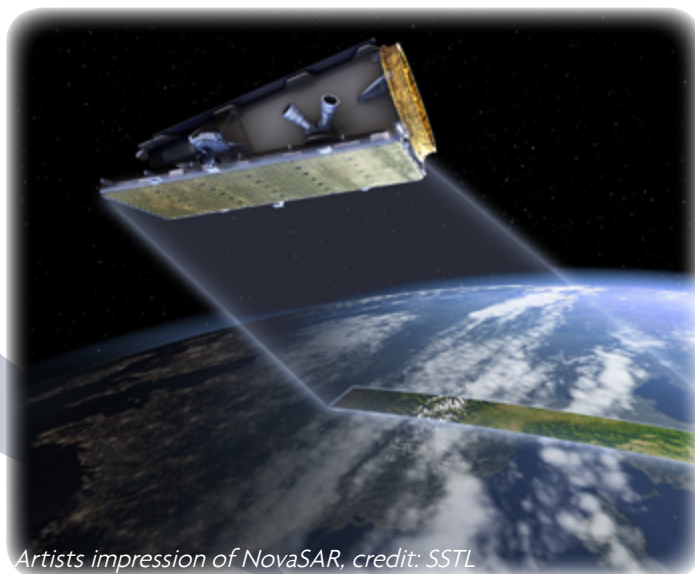


Innovation supporting growth continued

NovaSAR

NovaSAR is an innovative and low-cost S-band radar satellite that is being designed and built by Surrey Satellite Technology Limited (SSTL). NovaSAR will deliver medium resolution (6-30 metres) Earth observation data; day and night, in all-weather, at a price similar to traditional optical missions, and for approximately 20% of the cost of conventional radar missions.

To help support the development of the first NovaSAR satellite, the UK Space Agency announced a package of £21 million in support of SSTL's development programme in 2011. 2014/15 saw the completion of the research and development activities to finalise mission concept and system design for the first NovaSAR. Work is now progressing on the full systems integration and ground testing activities for both platform and payload.

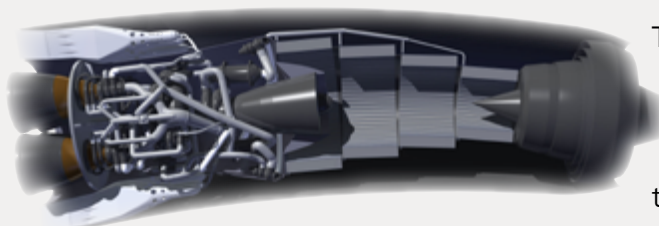


Artists impression of NovaSAR, credit: SSTL

Synergetic Air-Breathing Rocket Engine (SABRE), innovation supporting growth

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

SABRE will be the first engine to operate in two propulsion modes. The engine will work as a conventional air-breathing jet while in the Earth's atmosphere, then switch to a rocket engine for the final ascent to space – a world first. This engine technology could be an important step in the development of a single-stage to orbit spaceplane that will be reusable and require less fuel than current expendable rocket launch systems.



Credit: Reaction Engines Ltd

The first £10 million of funding for engine development was authorised in 2014 and will be used to support work up to the Preliminary Design Review, delivered via the European Space Agency's General Support Technology Programme.

Growth through 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.

CMIN 2014, investing to secure growth

In December 2014 at the European Space Agency's Council of Ministers, the UK Space Agency pledged more than £200m in carefully targeted space projects that will deliver world-class science and innovation, and stimulate

growth in the UK space sector.

The package of investment allows the UK to:

- lead the design, development and testing for the rover vehicle for Europe's ExoMars mission. In 2019, the rover will drill below the surface of the planet and analyse samples using its on-board laboratory;
- provide UK researchers and companies with access to the International Space Station so that they can perform experiments on materials science, additive manufacturing and medical sciences. It will also allow the UK to install a new telecommunications capability on the station: a project that has led to inward investment by an overseas company that will establish a presence here in the UK;
- ensure that the UK retains its lead in the satellite telecommunications sector by developing the next generation of satellites and applications. Projects supported include the new "Quantum" small and flexible satellite developed with £200m of industry commitment. The project has significant potential for generating exports.

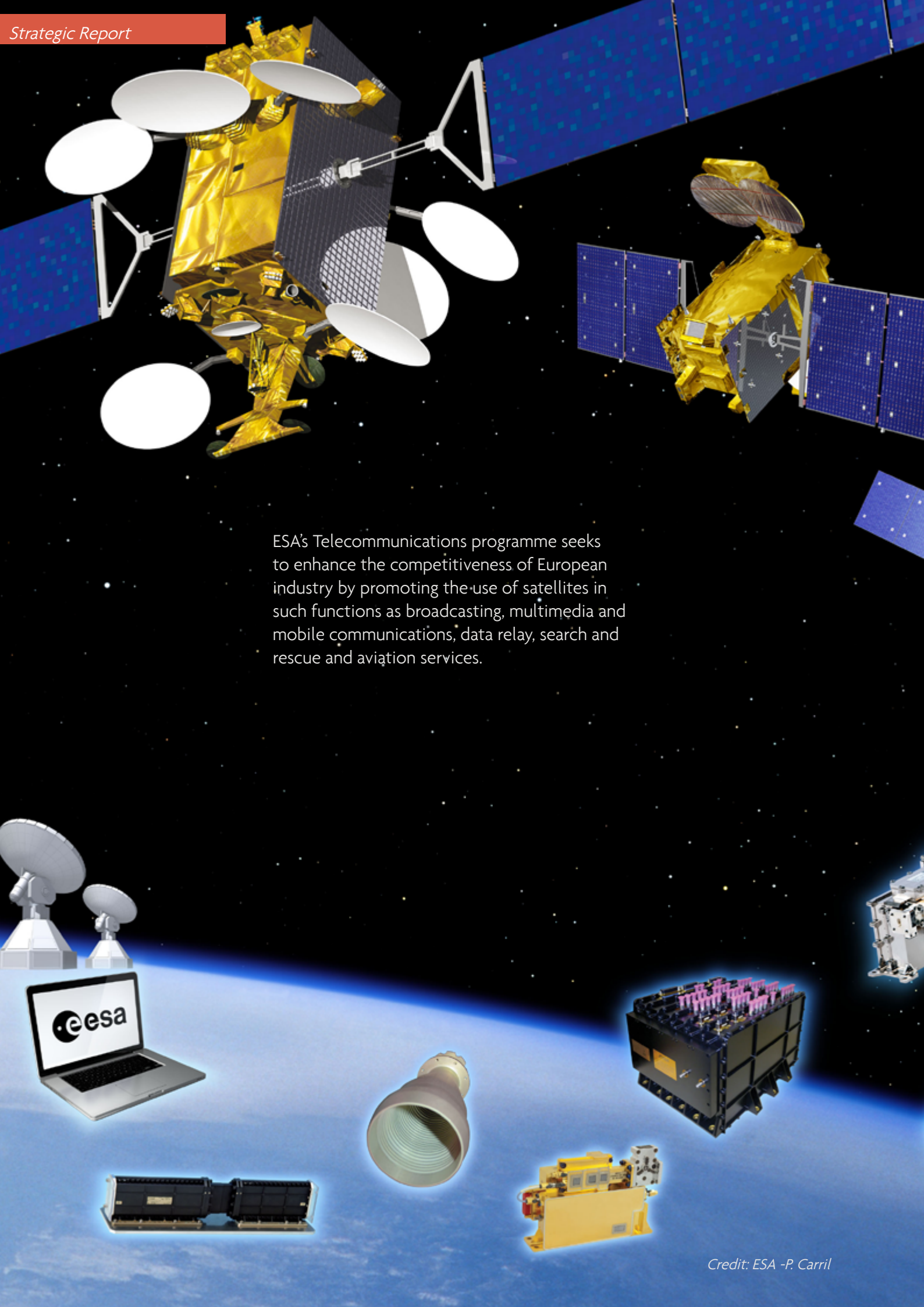
ARTES

The UK Space Agency partners with Innovate UK to manage UK involvement in ESA's ARTES programme. The programme undertakes the research to develop the next generation of commercial telecoms satellites, applications and supporting infrastructure. It leverages industry funds and is managed from the new ESA ECSAT (European Centre for Satellite Applications and Telecommunications centre) that will be opened by Ministers in summer 2015. New opportunities will be created from our involvement in this programme, including:

- The Integrated Applications Programme which runs from Harwell delivering products and services integrating different sources of data from space. Much of the growth of the UK space industry will come from these downstream applications.
- PPP (Public Private Partnership) programmes whereby public investment is used to retire technological risks, leveraging in turn large private investment. Future PPP projects include the inaugural flight of the NeoSat next generation of geostationary platforms – a market worth £1bn over the next decade - and a new PPP (either via UK based



CMIN 2014, credit: ESA



ESA's Telecommunications programme seeks to enhance the competitiveness of European industry by promoting the use of satellites in such functions as broadcasting, multimedia and mobile communications, data relay, search and rescue and aviation services.

Growth through new opportunities continued

Inmarsat or other major global operators including inward investors).

- A technology development programme for game changing technologies at variable levels of co-funding, depending on company size and risk.

National spaceflight programme

The government's Space Innovation and Growth Strategy 2014 -2030 and the Space Growth Action Plan both include an ambition to create a UK spaceport. This will provide a focus for regional and international investment for growth, establishing the UK as a leader in the rapidly-expanding space market, preparing the UK for new launcher technology and helping make the UK the place for space.

Work to establish the feasibility of a UK spaceport began in 2012, when the Department for Transport (DfT) and UK Space Agency asked the Civil Aviation Authority (CAA) to

review the operational environment and regulations to allow spaceplanes to operate. The consultation published in July 2014 referred to eight coastal locations that could be used for a spaceport, in March 2015 the CAA shortlisted five sites:

- Campbeltown, Scotland;
- Glasgow Prestwick, Scotland;
- Stornoway, Scotland;
- Newquay, England; and
- Llanbedr, Wales.

RAF Leuchars was also announced as a potential temporary facility.

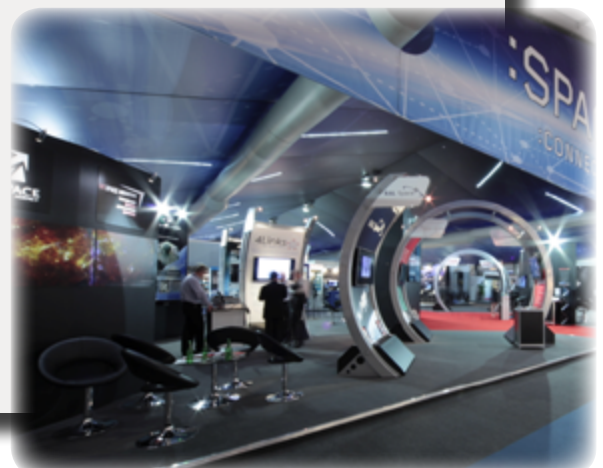
The next step is for DfT to develop a detailed technical specification of spaceport requirements, prior to inviting proposals. This is due to be published later in 2015.

Farnborough International Airshow, growth through new opportunities

The Agency championed the UK space sector in the Space Zone at the Farnborough International Airshow 2014, hosting 16 UK industry exhibitors on the UK stand, supported by the European Space Agency and others. The Space Zone was visited by 47% of Farnborough visitors, including the Secretary of State for Business Innovation and Skills, UK Minister of Universities, Science and Cities, and Jean-Jacques Dordain, the Director General of ESA. We built on ambitions from previous shows to engage a wider variety of stakeholders by running 12 seminars over the course of the week in partnership with industry. Agency staff were also able to meet with existing and new partners, engaging in over 100 meetings at the show.

The Space Day Conference saw the launch of an Agency report on the future of national spaceflight in the UK. More than 200 stakeholders and press attended the conference leading to extensive broadcast and written coverage. The announcement proved of great interest online and on social media.

The UK Space Agency presence over the weekend and Futures Day was supported by the presence of British ESA astronaut Tim Peake who was there to support STEM messages to young people and the general public.

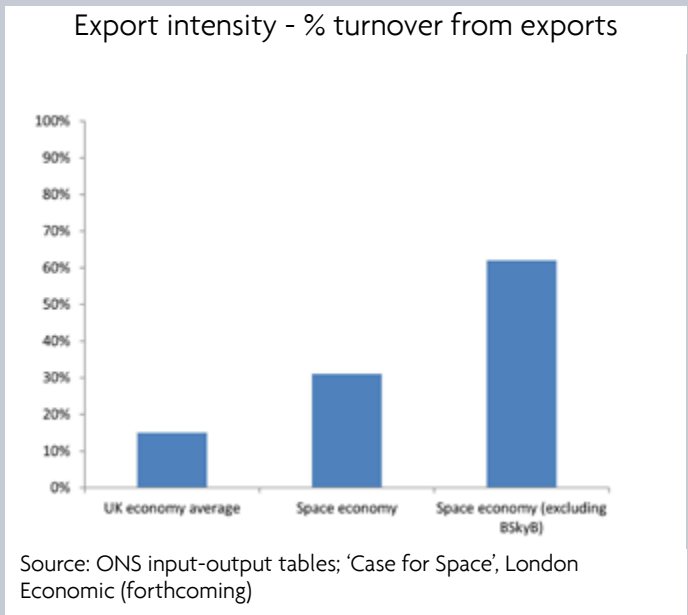


Growth from export

To realise our vision of growing the UK’s share of the global space-enabled market to 10% by 2030 (or £40 billion a year by current estimates), exports must increase. The new International Space Policy team at the UK Space Agency is now playing an important role in encouraging space exports, inward investment and the building of trusted relationships with our international partners, including other national space agencies. The UK Space Agency has continued to develop new, and improve existing, relationships with other parts of government –including the FCO, UKTI, the Science and Innovation Network, Innovate UK and the Satellite Applications Catapult to support the UK space industry to win growth through exports.

Exports

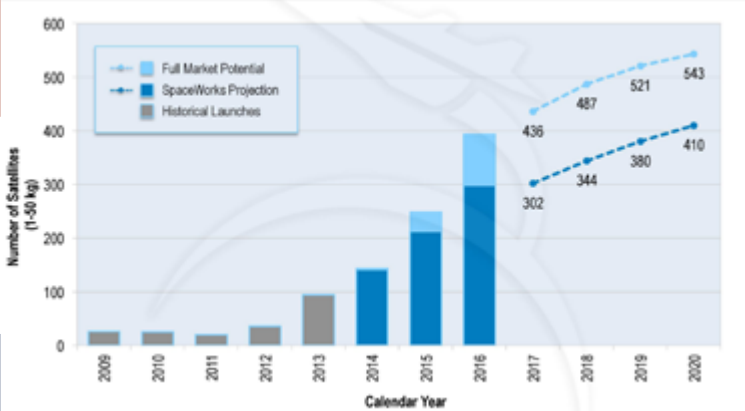
As a response to the Space Growth Action Plan proposed by industry, the Agency has established a high-level Space Export Group. The group, with representatives from government departments engaged in exports alongside UK industry addresses the competitiveness of the UK’s export environment for the space sector. The Agency has also undertaken a number of international engagements to promote our industrial and academic sectors, including workshops established jointly between the Agency and UK embassy teams in China, Singapore, Japan and the USA.



Inward investment

The UK Space Agency continues to work closely with UKTI to promote the UK as an excellent business-friendly location for starting and growing a space company. During 2014/2015 this has underpinned important successes leading to the establishment of UK offices for four international space companies: MDA, Lockheed Martin, Sener and GMV, alongside important UK business expansions for Eutelsat, Com Dev, and new UK offices for smaller entrepreneurial space industries such as Neptec and SPIRE.

Small satellite launch projections to 2020



Source: SpaceWorks 2014 Nano/microsatellite market overview

The UK’s proposals to build a spaceport by 2018 will provide low-cost small satellite launches, helping to secure a leading position and new business opportunities in this rapidly growing market.

Inward investment from Canadian company Com Dev

Companies are attracted to the UK by a supportive business environment including clear regulations and fair access to spectrum as well as the ability to use UK excellence in science as a springboard to bid for contracts to build public and private owned satellites within the European community. Since 2010 at least twelve companies have invested in the UK including Canadian company Com Dev, a global leader in telecommunications systems for the space sector. Com Dev have expanded their presence in the UK by buying Scottish Company MESL and established a presence at the Space Gateway in Harwell Oxfordshire for their subsidiary company exactEarth which makes satellite data services available to the global maritime market.



“The space market in the UK is booming. The British government’s decision two years ago to sharply increase spending at the 20 nation ESA has stimulated the growth of many British companies particularly in Earth observation and telecommunication satellite programmes.” Mike Pley of Com Dev, Space News: 19 Jan 2015

International Partnership Space Programme

The UK Space Agency is investing up to £32 million to open opportunities to develop international partnerships for the UK space sector.

The International Partnership Space Programme (IPSP), running over two years, will support UK companies to become trusted partners to provide high-tech exports. These new opportunities will grow the UK space sector and create jobs.

The first call for proposals was launched in November 2014 and despite the call only being open for a month, 44 excellent project ideas were received. An independent assessment panel picked the best nine projects. 31 proposals have been received during the second call; and these will be progressed during 2015/16.

The initial projects include large telecommunication satellites being used to provide connectivity over sizeable parts of Africa enabling essential services such as banking

or money transfer, e-education and maternal health. Other projects are enabling the evolution of safety critical aircraft landing systems using Global navigational systems and the enhancement of the UK as a centre for safety enabled services over the Pacific. There are also projects looking at novel climate measurement techniques with China and in enhancing Earth observation techniques in partnership with Kazakhstan.

Provided these projects deliver the expected benefits to the UK and partner countries, we hope to extend the programme beyond its initial two year period.

Growth from exports continued

I-Sat Connection

Inmarsat is working with international partners in Sub-Saharan Africa to bring internet connectivity to local communities in Nigeria and Kenya. This pilot project forms part of the UK Space Agency's programme to generate new opportunities for the UK's space and satellite industry in emerging and established space-faring nations.

Working with Equity Bank Kenya, Inmarsat will increase connectivity to drive inclusive digital services at over 200 locations across Kenya. By partnering with Mobile Alliance for Maternal Action (MAMA), maternal and child health services will be brought to 50 physically and technologically disconnected rural communities in remote locations of Nigeria.

Both projects will also be used to enhance local economies by providing internet access to the communities with all the associated benefits this will bring. The Satellite Applications Catapult will be working alongside Inmarsat, connecting UK applications experts to these remote users in order to provide information services designed to grow and enhance these emerging markets.



Providing connectivity to enable digital maternal and child healthcare - Mobile Alliance for Maternal Action (MAMA), Nigeria

Science to underpin growth

The Agency believes in the intrinsic value of science as a national endeavour. History shows that sustained investment in basic science aimed at seeking new knowledge delivers tangible benefits. Our Programmes Directorate is responsible for the delivery of a range of projects. Many of these projects are science based and involve managing the UK input to ESA missions. These include Gaia, Solar Orbiter, JUICE, Euclid, ExoMars, Lisa Pathfinder, BepiColombo and Rosetta. We are also involved in bilateral projects such as STEREO, a NASA mission and Hinode, a Japanese mission, both include design and development from UK teams.

UK scientific outputs from ESA missions are higher when the UK has a Principal Investigator or an instrument on one of the ESA mandatory core missions. These instruments are funded out of the UK Space Agency national budget.

ExoMars

At £214 million, the UK is the second largest European contributor to this programme and leads the development of the ExoMars rover.

In December 2014, at the European Space Agency's Council of Ministers, the UK Space Agency secured leadership of the development of the ESA ExoMars Rover with an additional investment of £47.7m. The UK also has naming right for the Rover meaning that all eyes will be on the UK when it lands on the surface of Mars in 2019.

ESA's ExoMars mission will land and conduct experiments on the surface of Mars to determine whether life does or has ever existed on Mars. The rover has three main science objectives:

- to search for signs of past and present life on Mars;
- to investigate the water/geochemical environment;
- to study Martian atmospheric trace gases and their sources.

The ExoMars rover, supported by the Trace Gas Orbiter to be launched in 2016, will carry out experiments analysing soil samples from depths of up to two metres, where the chances of finding organic compounds that indicate past or present life are greatest.

There are eight scientific instruments on-board the rover including the UK-led Panoramic Camera (PanCam). This

year the PanCam team have completed the breadboard, delivered the software interface simulator and commenced the building of the structural model.

Earth observation (EO)

Earth observation is identified as one of the Agency's highest priorities in our 2015/16 Corporate Plan. The Agency's responsibilities are broad. They include European and domestic policy, technology, missions, instruments, data and ground station infrastructure. Together, these enable the multiple uses of EO for science, society and economic benefit. The year to 31 March 2015 was an historic one in which there was a step change in the provision of routine, reliable and consistent information about our planet on a global scale thanks to the launch of the first of the Copernicus 'Sentinel' satellites in April 2014. UK industry is building core elements of the space and ground segment of Copernicus while the Agency secured an agreement to gain access in the UK to Sentinel satellite data. This will underpin the ability for the commercial and public sector to use the data and thereby generate growth in applications and services.

The Agency represents the UK in decision-making of ESA EO programmes including the Earth Observation Envelope Programme (EOEP). Notably, the Biomass mission was agreed in February 2015 by ESA member states. This mission will provide cutting edge science on the status and dynamics of tropical rainforests. Science aspects are led by Sheffield University.

A key priority for the UK is to become world leaders in climate services. The UK Space Agency funded and chaired a national coordination group spanning academia, industry and government to look at the barriers to creating quality climate data sets in a sustainable and operational way. The success of this group and the coordinated plans have led to a demonstration project being funded in the coming year.

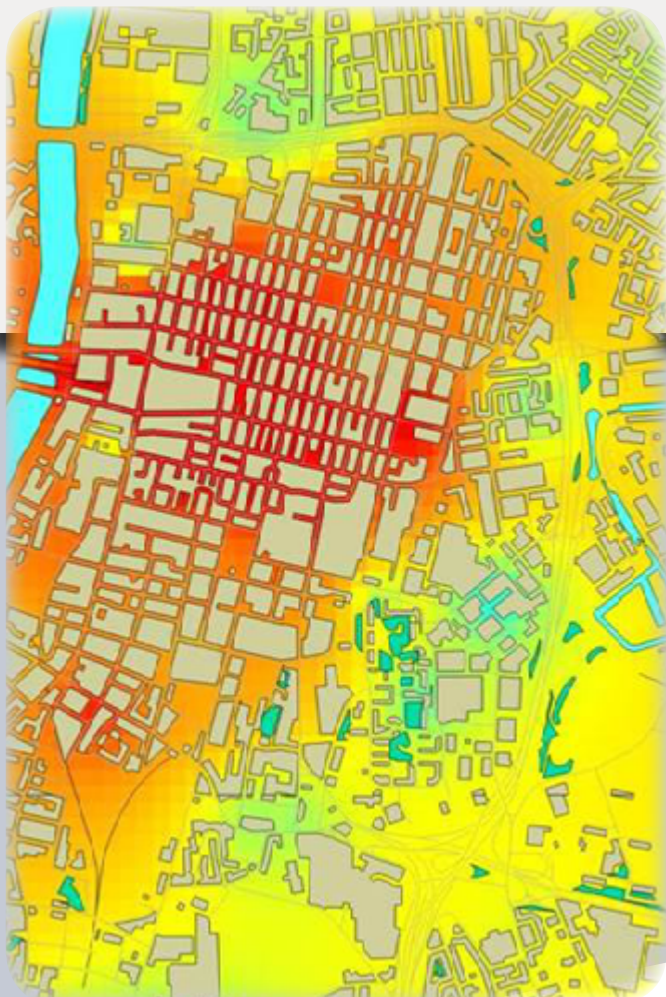
The UK's science base underpins the innovation that drives economic growth. The UK Space Agency therefore works closely with the Natural Environment Research Council, Defra, Department for Energy and Climate Change (DECC), the Met Office and Innovate UK to support and encourage excellent science and innovation

Science to underpin growth continued

to underpin the EO sector in the UK. The UK Space Agency champions the EO community at international fora such as the Committee for Earth Observation Satellites (CEOS).

Earth observation case study: Air quality

Many of the SSGP projects feature the use of EO data. For example the SSGP Air Quality Hotspot Mapper, led by University of Leicester was a three month feasibility study to integrate satellite air quality data with local and traffic data to provide a bespoke GIS application with outputs relevant to local authority needs. This project used satellite data to improve local authority data by integrating state of the art Copernicus MACC II regional air quality feeds with novel traffic flow data and local data to provide bespoke air quality outputs.



Microgravity and human space flight

ELIPS is ESA's European Life and Physical Science programme, which delivers science on the International Space Station (ISS) and a range of other space-analogue facilities, such as drop towers, parabolic flights and Antarctic stations. The UK is a relative newcomer to this programme, having joined in 2013, but UK scientists have already made impressive impacts, utilising these unique facilities.

An International Life Science Research Announcement in 2014, seeking new experiments to fly on the ISS, saw significant UK success. The top two rated proposals came from UK research teams, studying muscle decline in space, and potential ways of counteracting this, and how a lack of gravity affects the respiratory system, using a novel 3D model of human bronchia. Both experiments will improve our understanding of human health here on Earth, as well as the effects of long duration human space travel.

With support from the UK Space Agency, development of another UK-led experiment, BioRock, is well underway and set for launch in 2016. This ground breaking experiment will study the interaction of microbes, rock and water in a microgravity environment – the ISS. The findings will improve our understanding of micro-organisms and how they adapt to new conditions. This is significant for astrobiology – understanding where life came from and under what conditions it may thrive – and will also inform future space mission planning and improve biomining here on Earth, a major industry.



Rosetta

2014 was a key year for ESA's Rosetta mission as it met its goal to rendezvous with Comet 67P Churyumov-Gerasimenko, ten years after the mission was launched. On 6 August 2014, Rosetta started analysing the comet and the details of its extraordinary geography began emerging. This enabled a landing site to be chosen for the Philae lander. Under intense media scrutiny the lander was released on 12 November 2014 and bounced its way onto the comet surface. The lander's instruments operated successfully before running out of power, including the Open University built chemical analyser, Ptolemy, which detected water and organics. The Rosetta orbiter continues to track the comet and to research the increased activity as it moves closer to the Sun. The Imperial College participation in the Plasma Consortium instrument has led to discoveries about the evolution in the gas-dust coma associated with the comet.

Rosetta has significant industrial and scientific UK involvement and the Open University has been able to apply their expertise in analysing complex atmospheres from the Ptolemy instrument to enter into spin-off collaborations e.g. with BAE Systems and the MoD on submarine safety equipment and Givaudan on scent analysis.

Credit: ESA

Education for growth

The Agency continues to use space to inspire young people to study science, technology, engineering and mathematics (STEM) to help develop expertise and skills vital for future growth of the space sector. It is anticipated that the achievement of the ambitious growth targets for the UK space sector will create an additional 100,000 jobs by 2030 (UK Space Innovation and Growth Strategy 2014).

The space and satellite technology sector directly employs 34,300 people. (Size and Health Study 2014) Over half of workers in the space sector hold a degree or higher, plus every direct space job supports more than two in the wider supply chain. (forthcoming Case for Space 2015 report)

The so called “Apollo effect” led to a tripling in the number of people completing Physical Science PhDs in the USA. UK’s first ESA astronaut, Tim Peake, to be the ultimate “STEM ambassador” when he joins the International Space Station in November 2015.

We work closely with many partners to help them use space as an inspirational context for teaching and learning. In 2014/15 this has included close working with the Space Education Office, ESERO-UK, to ensure that excellent space-related resources are available to teachers. Support for the National Space Academy has enabled them to train teachers to use space effectively in their teaching and to launch a Higher Apprenticeship in Space Engineering with the first cohort of students now studying at Loughborough College and further expansion of the programme planned for other colleges across the UK.

The Agency has appointed a National Point of Contact for Skills to address the recommendation in the Space Growth Action Plan that we help improve the supply of highly skilled workers for the growing space sector. The Agency’s education and skills strategy is being updated to take account of this new priority.

For the fifth year the Agency took part in the Big Bang



Tim Peake at ESA Mission X event at Farnborough show

Fair (March 2015), the UK's largest celebration of science, technology engineering and maths for 7-19 year olds. We partnered successfully with ESA, the Royal Observatory Greenwich (ROG) and Raspberry Pi to illustrate why space is important to everyday activities here on Earth. ROG focused on the science behind satellites, ESA demonstrated case studies on how we use space data in a variety of fields from telemedicine to tracking shipping while Raspberry Pi showcased the Astro Pi board and schools coding challenge. Agency staff provided careers and education resource advice to students and teachers with nearly 2000 walking away with a Space:UK magazine.

Astronaut education programme supporting Tim Peake's mission

The announcement of Tim Peake's mission to the ISS in November 2015 has created a major opportunity to use space to inspire people in many walks of life. The UK Space Agency is delivering multiple projects designed to encourage young people to take an interest in STEM subjects and to consider STEM-related careers.

This year, a Europe-wide ESA competition selected the name 'Principia' for the mission to celebrate the contribution to science of Sir Isaac Newton. The BBC's Blue Peter subsequently ran a competition to design the mission patch for Principia. A food challenge for schools was run with the British Nutrition Foundation and Heston Blumenthal, using cookery to help students learn about the science of nutrition as they designed meals for Tim to eat in space. The Agency has been working closely with UKspace and the Raspberry Pi Foundation on a coding challenge for schools, which will give school students the chance to plan and code experiments to be carried out in space by Tim on a dedicated 'Astro Pi' computer.

A host of other activities are in advanced stages of planning. All of these activities require careful preparation and coordination with ESA to integrate them into Tim's training and flight schedule and to ensure that all the necessary hardware reaches the ISS successfully.



Mission X has continued to go from strength to strength with over 21,000 school children from about 300 schools across the UK registered for the 2015 challenge to train like an astronaut during January, February and March; alongside children from 27 other countries around the world. In addition to improving their fitness and activity levels, the challenge helps students to understand the science behind exercise and diet using astronauts to inspire them.

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. There are also exciting new developments in technologies and long term monitoring services which are making it worth investing in operational services. Such is the versatility of satellite applications that the UK government identified satellites as one of the 'Eight Great Technologies'. The UK is not only a world leader in the research and development of satellite technologies, but is also well positioned to be at the forefront of the commercialisation of satellite applications. Data from space is extremely important to the public sector, for example it is already used by the Environment Agency to map flooding, by Defra for Earth observation policy and applications and by DECC for the use of space in climate change monitoring.

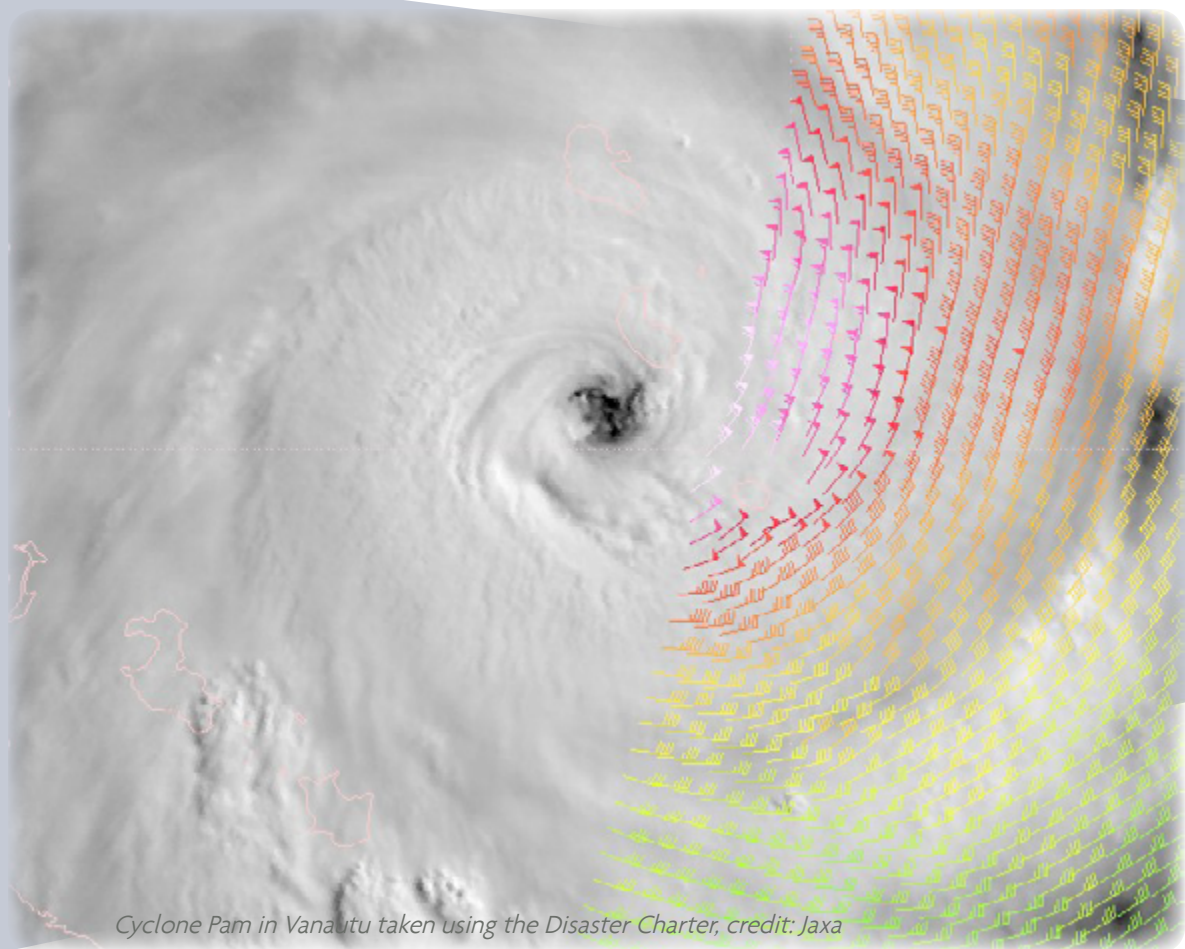
Disaster Charter

The Disaster Charter has been very active during 2014/2015 and has supported the needs of the multiple

UK stakeholders for the Charter, including Cabinet Office, DFID, FCO, Environment Agency and British Geological Survey. This has included four UK Charter activations (hurricane Gonzalo in Bermuda, Ebola crisis in West Africa, cyclone Pam in Vanuatu and the Villarica volcano eruption in Chile). In particular the UK was added as authorised users for the Ebola activation, gaining access to a variety of map products for the affected areas produced by the Charter which were used by DFID and Cabinet Office.

Meanwhile the UK's own satellite contribution to the Charter (DMC 2) has been tasked to acquire imagery of over 30 emergencies, including flooding in regions such as Afghanistan, Brazil, Pakistan, Sudan and Vietnam, volcanoes in India, Indonesia and Mexico, earthquakes in Chile and Nepal, cyclones in Australia and China, fires in Chile, landslides in Tajikistan and Panama. It has also been used in support of the search for Malaysia Flight MH370.

In addition to responding to the specific needs of a disaster, our involvement with the Charter offers us an opportunity for engagement with new users. During 2014/15 UK provided training to the civil protection agency of Chile (ONEMI) as well as training civil



protection experts from our own Overseas Territories. In this way we are able to share best practice with other governments about the role and effectiveness of satellite imagery in such situations and encourage a wider familiarity with the satellite systems themselves.

Space for Smarter Government Programme (SSGP)

SSGP sets out to make government an intelligent customer that drives growth through using satellite derived products and services. It also aims to help government provide more effective and cheaper services by making better use of existing investment in satellites.

The UK Space Agency, working with the Satellite Applications Catapult, initiated SSGP in 2014, to encourage the government departments to use space products and services and thereby drive growth in this sector. The objectives of the SSGP are:

- to inspire and enable government use of Space for smarter, more efficient operations, saving money and making use of existing investment;
- to encourage government to drive growth through the export of space products and services.

With £1m invested in the first year, SSGP has produced greater awareness and understanding across government with focal areas developed in environment, rail transport, natural hazards and local authorities. SSGP has supported Defra to create a roadmap that sets out a detailed approach to deliver its vision: 'By 2020 satellite data is playing an indispensable role in policy development and operations across the Defra network'. In addition, two calls have funded 15 projects (many with SMEs) with new applications under development.

Exeter City Council

Exeter City Council are using GPS-enabled devices in waste crew vehicles to record and manage waste collection data, saving a total of £490,000. A web-based self-service form allows residents to check bin collection data 24 hours a day which has greatly reduced phone calls to the council's contact centre. Waste crews can work more efficiently, by tackling issues as they arise.

The SSGP project allowed the exploration of further potential uses for the satellite data too; Exeter City Council looked at the potential to monitor and protect local trees using a satellite enabled system developed using funding from SSGP.

This is just one example of how local government is benefiting from the advice and expertise provided by the SSGP programme.



Credit: UK Authority

Supporting delivery

Our 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 be possible. Our people strategy, published internally in October 2014, is based around four key themes:

- leadership and management
- learning and development
- resources and performance management
- reward and recognition

It sets out a two year strategy which leaders within the Agency are committed to embedding in their ways of working. Over the course of this year many of the targets have already been hit and we will continue to promote and monitor the success of the strategy.

Over the last 12 months we have focussed on recruiting staff to our vacant positions. 19 positions have been successfully recruited, of which six were filled by internal candidates. As at 31 March 2015 this brings our total headcount on payroll to 63 people (with an additional six positions still vacant).¹ 57% of our staff are female, 43% male (2013/14: 54% female, 46% male).

In this year's Civil Service Staff Survey, we obtained an employee engagement index of 58%, which is 2% higher than the BIS average. The survey highlighted a significant increase in positive results in five of the nine drivers of engagement. We have been holding team meetings to better understand the views captured in the survey. These follow-on discussions will result in an action plan which will be taken forward over 2015/16.

As set out in our people strategy, the Executive Board is committed to investing in development of our people. 172 training days have been recorded this year which equates to 2.6 days per person (this is a conservative estimate and does not include mandatory Civil Service training). A focus area this year has been the 'Leading

with Purpose' course, a programme of leadership training, to enhance management capability. Six managers have already attended, with further managers to follow. Staff are also encouraged to expand their boundaries by regular contact with Agency stakeholders, including site visits to industry, stakeholders and attending national or international meetings.

As part of the people strategy, the Agency launched the reward and recognition scheme (26 awards were issued in 2014/15). This has proved an effective way of recognising individual or team achievements.

The UK Space Agency is fully committed to providing equal opportunities for all staff. The Agency follows the Civil Service guidelines, ensuring that all staff have equality of opportunity on the basis of their suitability and skills, without discrimination on the basis of age, disability, gender, flexible working, marital status, sexual orientation, race, colour, nationality, ethnic or national origin or religious belief. The Agency ensures that recruitment is carried out on the basis of fair and open competition, and that selection is on merit in accordance with the Office of the Civil Service Commission (OCSC) principles. The Agency works closely with its sponsor department BIS, to ensure these principles are adhered to.

Days lost due to absence

In 2014/15, the average number of working days lost was seven days per annum per employee. Excluding four long term absences, the average would be 1.5 working days. The average working days lost has remained the same as the previous year, although the adjusted average figure excluding long term absences has reduced by one day (2.5 reported in 2013/14).

¹ See Note 3 to the Annual Accounts for more detailed information on staff numbers.

Financial review

Overall financial performance

	2014/15 Budget £000	2014/15 Outturn £000	Variance £000
Resource DEL-Admin	3,675	3,326	(349)
Resource DEL - Programme	195,083	199,876	4,793
Capital DEL - programme	105,000	112,255	7,255
Total DEL	303,758	315,457	11,699
Resource AME	736	782	46
Resource AME - forward contract revaluations	-	25,859	25,859
Total AME	736	26,641	25,905

The Agency's 2014/15 final Departmental Expenditure Limit (DEL) outturn (excluding Annually Managed Expenditure), was £11.7 million above formal allocation. This was within the outturn target agreed with our BIS sponsors, who approved additional spending to cover the following:

- The settlement of an ESA liability following the closure of the first phase of the ARTES 3-4 programme. Closure led to commitments being brought forward and also realised historic inflation and over-return adjustments; together these culminated in a liability of €14.7m. Risk of this materialising was discussed with BIS throughout 2014/15;
- Pay the first 2015 ESA call up in full which accommodated the ESA Council decision (Dec 2014) to change the subscription payment ratio to 40% in February 2015 (previously 30%). N.B. this led to the significant increase in prepayments from £12.1m in 2013/14 to £39.2m in 2014/15;
- Fulfil all UK contributions for the ESA Harwell build.

During the reporting period we recognised a notional loss of £25.9m in Annually Managed Expenditure (AME) caused by a fall in the fair value of forward exchange contracts held at 31 March 2015 compared to the prior year. In 2014/15 the Agency did not have an allocation for these unpredictable movements which are outside the

control of management. This does not represent a cash loss. Hedging is used to manage risk and ensure that the Agency is able to meet its commitments to the European Space Agency.

Funding streams

The Agency's finances consist of two key funding areas namely, ESA programmes and national programmes.

ESA programmes

At the ESA Council of Ministers 2014 an increased level of commitment was made to ESA Telecommunication, Earth Observation and Robotic Exploration programmes amounting to €260m (at 2014 economic condition). ESA's financial year ends on 31 December; in 2014 the UK subscription levels were €270m (plus €12.5m relating to SABRE) rising to €330m in 2015.

ESA programme	2014 ⁽ⁱ⁾ subscriptions €000	2015 ⁽ⁱ⁾ budget €000
Mandatory Activities and Science Programme	123,409	113,742
Earth Observation	63,390	78,676
Telecommunications & Integrated Applications	43,155	67,360
Robotic Exploration	20,208	41,576
Human Space Flight & Microgravity	4,573	10,167
GSTP ⁽ⁱⁱ⁾	15,810	11,788
Navigation - Galileo	10,642	4,278
Space Situational Awareness	1,351	1,978
Total	282,538	329,565

Notes:

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

ii. The first phase of the SABRE programme is underway with the first instalment made against the €60m business case via a £9.2m (€12.5m) increase to ESA GSTP.

Financial review continued

Hedging ESA subscriptions

The Agency’s Executive Board is responsible for risk appetite; it is therefore this Board, with advice from the Steering Board, Audit Committee and the finance team, which decide the optimal conditions upon which to establish new forward exchange contracts.

The current forward contact portfolio was deemed sufficient to cover the financial obligations to ESA up to 31 March 2015. Longer term forward contracts will be purchased in line with the risk appetite of the Agency’s Executive board.

Financial instruments are in the form of forward exchange contracts (commonly called Hedging Contracts) to purchase fixed amounts of Euro currency on specific dates in the future. The Agency re-values the forward exchange contracts it has established at the end of each financial year; the Bank of England supply market rates on which these valuations are based. The UK Space Agency has applied a consistent methodology of valuation within the accounts produced to date and, therefore, any alteration in the value of the derivative financial instruments is a direct result of currency market movements. The UK Space Agency aligns with the BIS central Hedging Policy to ensure we have a harmonised approach for the consolidated BIS accounts. Currency fluctuations in GBP to Euro remain the primary risk to the Agency’s ability to manage expenditure against the annual delegated Departmental Expenditure Limits. These forward exchange contracts were established as a mitigating measure to control international spend over the period of the Comprehensive Spending Review 2010, thus reducing the Agency’s exposure to exchange rate fluctuations. Note 7 to the Financial Statements shows that these have been effective in terms of the technical requirements set out in International Accounting Standard (IAS) 39.

National programme

The National Programme is made up of several distinct areas of activity. Below is a table summarising the key areas of 2014/15 expenditure (N.B. excluding salary costs).

National Programme	£000
Core Programme	19,108
NSTP	9,641
Major projects - NovaSAR	5,636
IPSP	7,064
Total national grants and other funding	41,449
Other operational programme costs	2,785
Total National Programme	44,234

In 2014/15 the International Partnerships in Space Programme was launched, which will see at least £26m committed across two years.

The NovaSAR project recognised £5.6m in 2014/15 however progress has slowed whilst the third party mission partner is secured.

Administrative costs

Admin expenditure was £3.3m which represents £0.4m underspend against budget, with the main drivers for this being; slower than anticipated recruitment, agreeing evidence with BIS for recharged central support services, and a delay to anticipated office works.

Administrative efficiencies were achieved through a number of secondments/loans at nil cost from other government bodies and industry. Honoraria to advisory committee members ceased, resulting in savings of over £120k.

The Agency utilises back office support services via the central BIS framework contract and UK Shared Business Services, delivering greater efficiency for the department of BIS as a whole.

Net assets

Net assets at year end were negative £7.9m, which was a £27.7m decrease from 31 March 2014; the key movement being the downward revaluation of the hedge contracts of £21m during the reporting period. This was caused by the volatility of GBP to Euro exchange rate markets, compared to the forward rates on the contracts held at year end. The forward contracts are still regarded as effective.

Cash

As at 1 April 2014 the Agency held cash reserves of £21.5m; these have subsequently decreased to £3.3m as at 31 March 2015. Cash forecasting is closely managed and balanced against individual budget profiles in order to maintain appropriate cash reserves. All cash reserves are held within the Government Banking Service accounts. 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.

Governance statement

Statement of the Chief Executive's responsibilities

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, unless it is inappropriate to presume that the UK Space Agency will continue in operation.

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

Our governance

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, and the delegation of financial authority from BIS.

I am supported in my role as Accounting Officer by a governance framework which contains the Framework Documents; this includes the Agency, its Boards, Committees and Senior Management. This governance framework is currently under review with completion due in 2015/16.

In forming my assessment I have examined:

- all board and committee meeting minutes and associated supporting papers to cover risks, finance and operational performance, including the new Agency balanced scorecard;
- a thorough overhaul of the Agency's internal control framework which examines:
 - Changes to performance recording and reporting; to include new management information;
 - fresh risk processes and reporting procedures;
 - a revamp of KPI reporting mechanisms;
- strengthened financial procedures of budget setting and monitoring;
- the policies in place impacting on risk such as fraud and whistleblowing;
- the work of internal audit, including work undertaken to evaluate funding assurance in UK universities where the UK Space Agency has provided significant funding; and
- the assessments of my individual directors as covered in their regular reporting.

So far as I am aware, there is no relevant audit information of which the NAO are unaware. I have taken all the steps needed to ensure that I am aware of any relevant audit information and established that NAO are aware of that information.

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

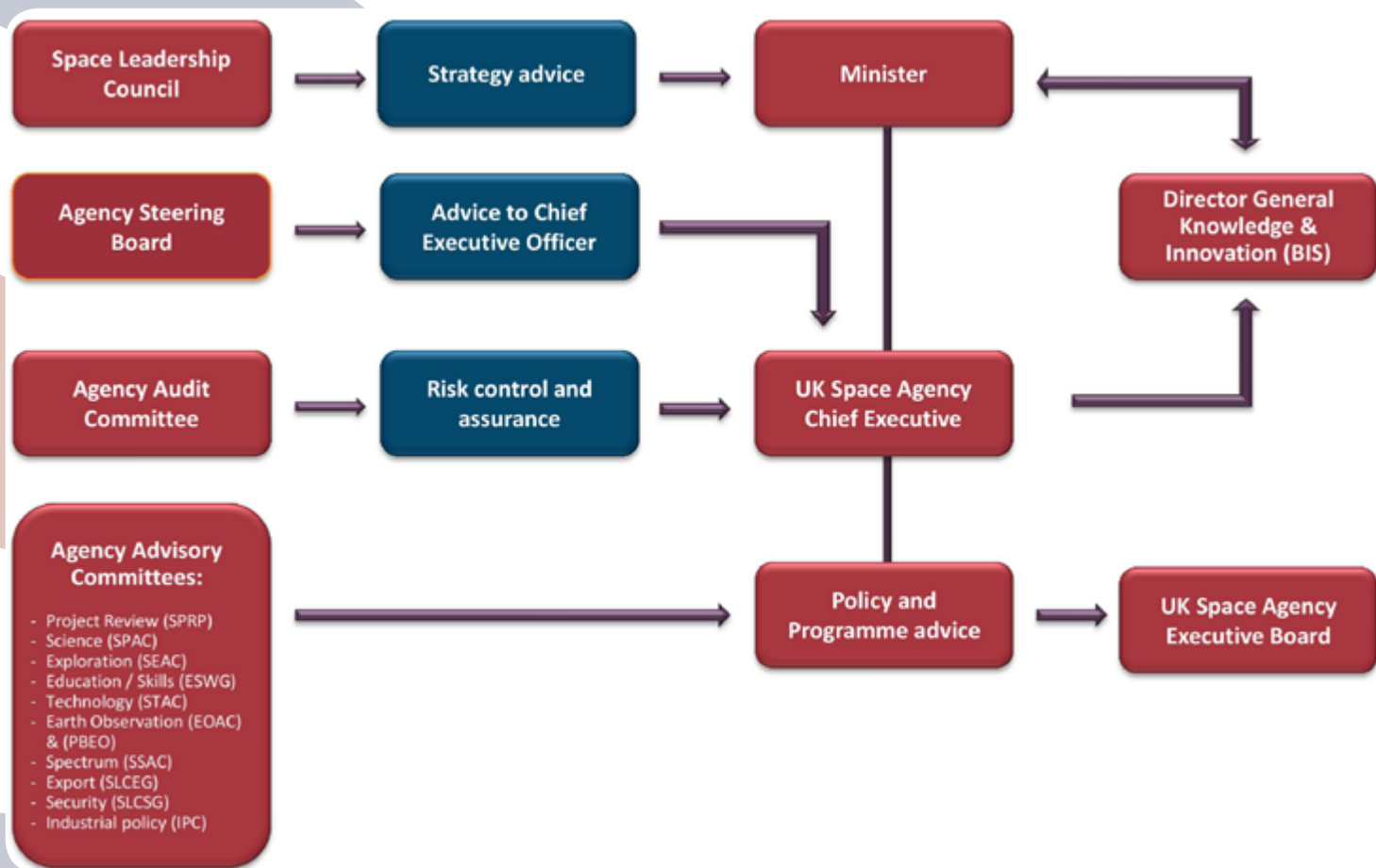
The UK Space Agency is accountable to the public through BIS and to Parliament for the funds it expends. Parliament monitors and influences the UK Space Agency through its Select Committees and the Parliamentary Ombudsman.

The UK Space Agency's working relationship and lines of accountability with its sponsor department, BIS, are defined through the UK Space Agency Framework Document, Corporate Plan and Letter(s) of Delegated Authority which are subject to periodic review.

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.

Our governance continued



Steering Board

The primary role of the Steering Board is to support the Chief Executive and his 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 operational effectiveness of the Steering Board is reviewed each year and in 2014/15 while overall the Board was considered effective, some areas for improvement were identified, and the resulting changes to process were implemented in year. A new chair of the Steering Board will be expected to be recruited by November 2015.

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 which is reviewed for accuracy prior to each Steering

Board meeting. The members of the Steering Board, their Terms of Reference and an overview of meeting discussions are available on the UK Space Agency website.

On 10 November 2014, two of our Non-Executive Members, Sally Cantello and Baljit Dhillon, came to the end of their appointments. Their replacements are Frances Saunders and Clive Tucker whom we welcomed to the UK Space Agency on 1 December 2014.

The Steering Board is made up of four non-executive members who are independent, the Chief Executive (with Accounting Officer responsibilities), the Senior Information Risk Officer and a BIS internal appointment. In addition to the Steering Board Members, the remainder of the UK Space Agency Executive Board attend as required. The Steering Board fully complies with the Corporate Governance Code.

Non-Executive Members of the Steering Board as at 31 March 2015:



Rob Douglas, CBE

Chair of the Steering Board

Rob took up the role in November 2011.

Rob has a background with Shell which he left in 1999 to work overseas in Brussels, The Hague and Milan. As well as his role with the Agency Rob is a business consultant and Chairman of the Queen Elizabeth's Foundation for Disabled People, Board Member of the Higher Education Funding Council for England and a Trustee of the Walton Charity. Rob was re-appointed for one year from November 2014.



Prof David Southwood

Member of the Steering Board

David took up the role in November 2011.

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. David was re-appointed for two years from November 2014.

Our governance continued

Dr Frances Saunders, CB

Member of the Steering Board



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 in 2006 -2012. Frances is currently President of the Institute of Physics and holds other non-exec roles with Sentinor Ltd and Cranfield University Council.

Clive Tucker

Member of the Steering Board and Chair of Audit Committee



Appointed in December 2014.

Clive is a solicitor and was, until 2010, 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.

Steering Board attendance 1 Apr 2014 - 31 Mar 2015

Rob Douglas (Chair)	David Southwood	Sally Cantello	Baljit Dhillon	Frances Saunders	Clive Tucker
7 (7)	5 (7)	4 (5)	5 (5)	2 (2)	2 (2)

Note: The numbers in brackets represent the number of meetings that could have been attended by the individual

“We had several valuable strategy sessions at the Steering Board in which we sought to shape, amongst other things, more effective engagement with our wide range of stakeholders. Individual Steering Board members act as Champions and Ambassadors for the UK Space Agency. All of us participated in a wide range of external meetings and events in support of Agency objectives”

Rob Douglas, Chair of the Steering Board, March 2015

Our governance continued

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 the Accounting Officer responsibilities. The Chairman of the Audit Committee reports to the Steering Board.

External appointments are in line with HMG guidelines for an initial term of office of three years and, exceptionally, can be extended for a further two years. All Non-Executive Members are independent and all external interests are listed in the Register of Members' Interests. The members of the Audit Committee and its Terms of Reference are available on the UK Space

Agency website: <http://www.gov.uk/ukspaceagency>

In addition to the Audit Committee members and internal and external audit representatives as ex-officio members, the remainder of the Executive Board may attend as necessary.

The Audit Committee generally meets on a quarterly basis but can meet more frequently to deal with exceptional matters. Five meetings were held over 2014/15, one of which was an ad-hoc meeting. Two meetings were not quorate in 2014/15 due to instances outside of management control. Non-Executive membership will be expanded in 2015/16 to mitigate this issue arising again.

Audit Committee attendance 1 Apr 2014 - 31 Mar 2015

Clive Tucker (Chair)	Baljit Dhillon (previous chair)	Sally Cantello	Frances Saunders
1 (1)	2 (4)	2 (4)	1 (1)

Note: The numbers in brackets represent the number of meetings that could have been attended by the individual

“This year the Audit Committee has continued to work closely with the UK Space Agency’s Executive team, the National Audit Office and the Audit and Assurance Services Group to oversee the internal and external auditing programme for the Agency. There have been positive outcomes from our internal and external audit programme, the recommendations of which will feed into improving the effectiveness of processes across the Agency.

We have focused on the development of the Agency’s risk strategy, advising on the assessment and mitigation of risk and inputting into the revision of the strategy. We have also held a session on financial assurance and governance for the Agency. Looking ahead, we will continue to focus on these key areas to help maintain the Agency’s level of assurance.”

Clive Tucker, chair of the Audit Committee who took over from Baljit Dhillon, March 2015

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 staff to keep up to date with the important matters of the Agency.

The Executive Board is made up of the following members:

Executive Board attendance 1 Apr 2014 - 31 March 2015

Number of Executive Boards	David Parker	Catherine Mealing-Jones	Chris Castelli	Peter Finn	Alice Bunn ¹
47	42	38	42	39	35

¹ Alice Bunn became Director of Policy in May 2014

Dr David Parker

Chief Executive

Appointed Chief Executive in January 2013 following an open, competitive process, David leads the UK Space Agency to manage the UK's civil space policy, regulation and programmes. David Parker is also head of the UK's delegation to ESA and former chair of ESA's Programme Board for Human Spaceflight, Microgravity and Exploration. David has worked for the UK Space Agency since its creation, following previous roles in the private space sector.



Our governance continued



Catherine Mealing-Jones

Director Growth

Appointed in January 2012, Catherine 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.



Dr Chris Castelli

Director Programmes

Appointed acting director in November 2012, Chris oversees the Agency's involvement with ESA on space science, technology and exploratory missions and manages the Agency's national programmes. Following a competitive selection Chris was awarded substantive promotion to director with effect from Nov 2014.



Peter Finn

Chief Operating and Finance Officer

Appointed in February 2014, Peter is responsible for the UK Space Agency's operational, financial and administrative functions. Peter leads the UK delegation to ESA's Administration and Finance Committee.



Dr Alice Bunn

Director Policy

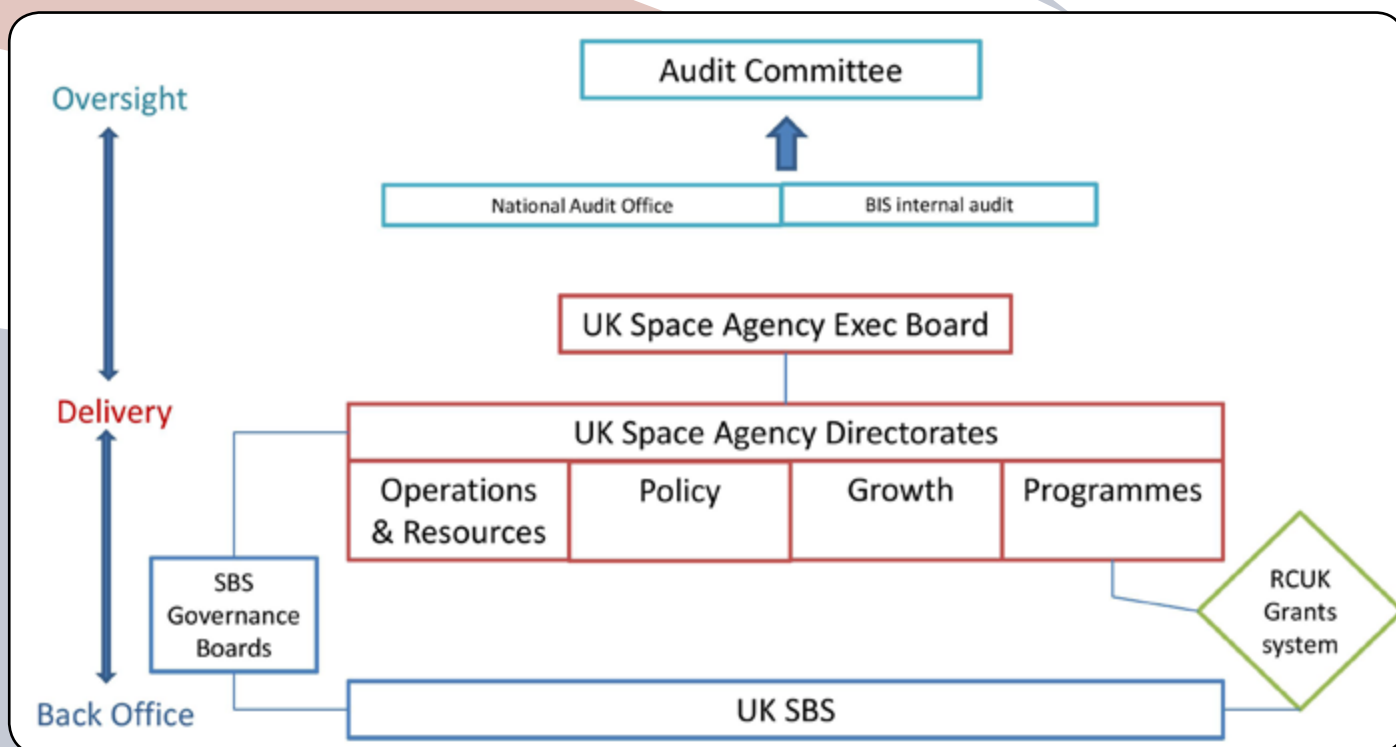
Appointed in May 2014, Alice leads on security, regulation, statute, communications and international engagement to stimulate and drive growth and enable strategy delivery.

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; and
- manage them efficiently, effectively and economically.

This is represented in the following diagram:



Outsourced services

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

As the UK SBS operating platform currently does not support a grant awarding system, we utilise the Research Councils UK (RCUK) grant system via the Science and Technology Facilities Council (STFC). The UK Space

Agency therefore places reliance on STFC's internal control mechanisms for the operational grant services. No matters of concern have arisen regarding any of the Agency's grants processed through STFC.

In 2014/15 there have been significant changes in the UK SBS assurance provision. The Government Internal Audit Agency (GIAA) now has the responsibility for the UK SBS audit programme. The GIAA reports provide input to UK SBS CEO's Quarterly Assurance Letter, which provides the cornerstone of the assurance I receive regarding UK SBS. Through the quarterly UK SBS Chief Executive Assurance Letters and the outcomes of the GIAA audits

I, as the Chief Executive, note a limited assurance for the effectiveness of internal processes and moderate assurance for customer facing services. As a result of the assurance provided by the UK SBS Chief Executive I note that UK SBS has continued to deliver in a number of areas and improvements have been noted in some areas. I do, however, highlight UK SBS as a key area of risk as outlined below. During the year this has included and continues to include:

- uncertainty relating to future staff reductions
- the planned transfer of some transactional services to Shared Services Connected Limited (SSCL), although a decision has now been made to discontinue on this path;
- uncertainty around the resilience of the 12.0.6 platform upon which UK SBS rely to provide the necessary levels of support, even allowing for the on-going support arrangements that have been negotiated with ORACLE (although it should be noted that the UK Space Agency itself is on the more resilient 12.1.3 platform); and
- uncertainty about the future of UK SBS pending the outcome of the BIS 2020 Review.

While some progress has been made in improving the control framework in UK SBS over the last 12 months the controls have yet to become sufficiently embedded in the organisation. The scope and scale of improvements required across parts of the framework for the Company are significant, particularly in relation to:

- IT Governance and Management;
- procurement;
- payroll; and
- disaster recovery.

I particularly highlight procurement, which received an Unsatisfactory Assurance level from GIAA. UK SBS continues to operate in a challenging environment with

often changing and sometimes conflicting priorities.

Although these risks clearly exist and must be closely monitored, there has been no direct operational impact due to these weaknesses.

The BIS legacy IT systems were successfully replaced in May 2014, via a department wide modernisation programme. The upgrade has had a positive impact on operations in the Agency.

Assurance programme

This review is informed by the annual internal audit work programme, our risk profile, the directors who apply the internal control framework, and going forward the 2014/15 NAO management letter and other reports.

Internal audit and assurance programme

Sufficient internal audit work has been undertaken during the year to allow the Director of Internal Audit to provide a positively stated and reasonable assurance opinion on the overall accuracy and effectiveness of the Agency's system of internal control. The overall opinion for 2014/15 is 'moderate assurance' based on the results of the five individual audits completed in year. This is the same level of assurance as for the previous year. Details of audit remuneration can be found in note 4 of the accounts.

The internal audit review programme is managed by the BIS internal auditors, Audit and Assurance Services Group (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 are provided below:

2014/15 Audit	Assurance level	Number of recommendations	Number of Recommendations left to complete
Arrow Project	Moderate assurance	1	0
Budgetary Control	Moderate assurance	5	3
ExoMars	Substantial	0	0
Expenses Investigation	Advisory	N/A	N/A
Information Assurance	Substantial	1	1
UK Space Gateway Development Programme Follow-up	Moderate assurance	0 (2 carried forward)	1

Internal control and support systems continued

The audit outcomes show that although some improvements are required to enhance effectiveness of the framework of governance, risk and control, there are no serious deficiencies in working practices. The remaining audit actions will be completed in 2015/16.

The Agency has developed a new Continuous Improvement Action Plan which consolidated the recommendations from all of its historic internal audits. Progress towards implementing the outstanding recommendations was monitored quarterly and presented to Executive Board and Audit Committee. Only six actions now remain in progress as at 31 March 2015 and these will be implemented over the forthcoming year.

The Agency has concentrated significant effort to improve the timeliness and effectiveness of its performance reporting including the creation of a new balanced scorecard, new KPI reporting processes and strengthened controls around the identification and management of risk. The Agency has also refreshed its letters of delegation and conducted finance training for key management posts. All staff members have been required to undertake the mandatory 'Responsible for Information General User (Includes government Security Classifications 2014)' training.

Information Security

In addition to the AASG Information Assurance internal audit, for which the Agency received 'substantial assurance', a security health check was also carried out. This is a mandatory annual requirement of both BIS and the Cabinet Office to assess the Agency's compliance with the HMG Security Policy Framework. AASG independently assured the independent assurance function. For 11 of the mandated security outcomes, the Agency was judged to be largely compliant, and for six, fully compliant. In summary, the improvements required to bring the Agency up to a fully compliant status throughout were largely related to the tightening of our internal management systems and improving the understanding of the interface between the Agency and BIS with regard to the delivery of IS/IT and shared services. An action plan to improve compliance, where practicable, is in place and will be delivered during 2015/16.

Grant assurance

Within AASG the Assurance Unit acts on behalf of the Agency (and the Research Councils), to review regularity of expenditure by research organisations in receipt of grants from the Agency. In 2014/15, the UK Space Agency's grant process was reviewed by the Assurance Unit. Assurance activities focus on the control environment and its effectiveness in ensuring compliance with the UK Space Agency terms and conditions for grant funding. Taking into account the generally positive nature of findings from the actual visits made, the programme has provided me with a satisfactory level of assurance. Relevant considerations include the good level of inherited assurance available from work in previous years undertaken by STFC, and the fact that the five-year rolling plan of visits is derived from a risk and assurance map.

Fraud

There were no instances of fraud identified within the Agency in 2014/15 and no instances of whistleblowing used by Agency staff.

Macpherson Review

Following the Macpherson Review the Agency reviewed its use of analytical modelling and did not identify any that were considered to be business critical. This was communicated to BIS and I can confirm that the Agency complies with the BIS requirements.

Data protection

Most of the UK Space Agency's back-office support functions, such as IT, are provided by BIS. Reliance that data protection requirements (including adequate security of data and IT systems) are properly managed and safeguarded is therefore placed on BIS. In addition, all staff comply with IT security guidance provided by BIS's IT department.

I am not aware of any breaches of personal data or IT security, including loss of IT equipment, during the reporting period.

Risk Framework

The UK Space Agency defines risk as an event or set of events that, if they occur, will have an impact on the achievement of the Agency's objectives. 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.

Understanding the Agency's risk profile and appetite is a key part of the effective management undertaken by the Chief Executive and Executive Board who use risk management as an on-going process to ensure that the right decisions are made for the right reasons. As risk management deals with uncertainty, there are no guarantees except to optimise decision making. Our goal is not to eliminate all risks, but to make informed decisions on their effective mitigation which supports the delivery of Agency outputs.

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 at the Executive Board and as part of the UK Space Agency management oversight activity as well as key risks being scrutinised at the Audit Committee and Steering Board.

The Agency's strengthened processes for risk management has led to a reduction in the volume of risks, a simpler definition of risks and their mitigation and an overall reduction in the Agency's risk profile.

Risk governance

Risk management is embedded in our activities, notably through the delegation of authority, which makes directors responsible for identification, assessment and recording of material risks, particularly within their sphere of responsibilities. Directors draw on outputs from a range of sources including internal audit reports, directorate risk registers and regular discussions with stakeholders. As appropriate, directors escalate risks to the Executive Board to consider for inclusion at the corporate level.

Corporate risks are those that have been assessed as having the potential to significantly impact on achieving key objectives. They may have significant legal, operational, financial or reputational implications that require Executive Board oversight for effective control.

Key corporate risks

Over the course of the year, the Agency has identified four super risks that it considers to have the highest potential impact on the Agency's operations. These risks as at 31 March are summarised below:

- successful delivery of the UK Space Gateway project;
- adapting to the increasing importance of the EU in space policy;
- impact of access to, and use of Russian space assets, as the result of its tensions with the Ukraine; and
- impact of delays to the creation of a UK spaceport or failure to secure an anchor spaceplane operator.

All of these risks are being managed with existing controls and mitigation plans in place.

A fifth super risk, relating to successful outcomes from the ESA Council of Ministers 2014 was closed this year following the UK Space Agency securing an extra investment of over £200m for Europe's space programmes.

Other information required in the Directors Report

- pensions are discussed in the remuneration report and the accounts;
- absence data can be found in the Our people section of Our performance;
- financial commentary is located in the Financial review section of Our performance;
- Alexander Tax Review – nil return.

Conclusion

I, as Chief Executive, am confident that I have the sufficient levels of internal control and assurance necessary to manage the business; consistent with my responsibilities as the Accounting Officer; and that the accounts for the year ended 31 March 2015 are a true and fair reflection of the organisation, and accord with Treasury guidance. I am confident that the necessary controls are in place to ensure the safeguarding of public money.

I recognise that the Agency has a number of important assurance goals to achieve over the following year, including:

- a review of the Agency's advisory bodies;
- a review of the Agency's SLAs and MoUs;
- embedding risk management further into the organisation;
- an agreed outcome of the governance framework review;
- support to BIS and UK SBS in improving overall performance to drive efficiency and build on 14/15 service improvements; and
- continuing to improve the Agency's approach to performance management; for example embedding improvements to the Agency's balanced scorecard.

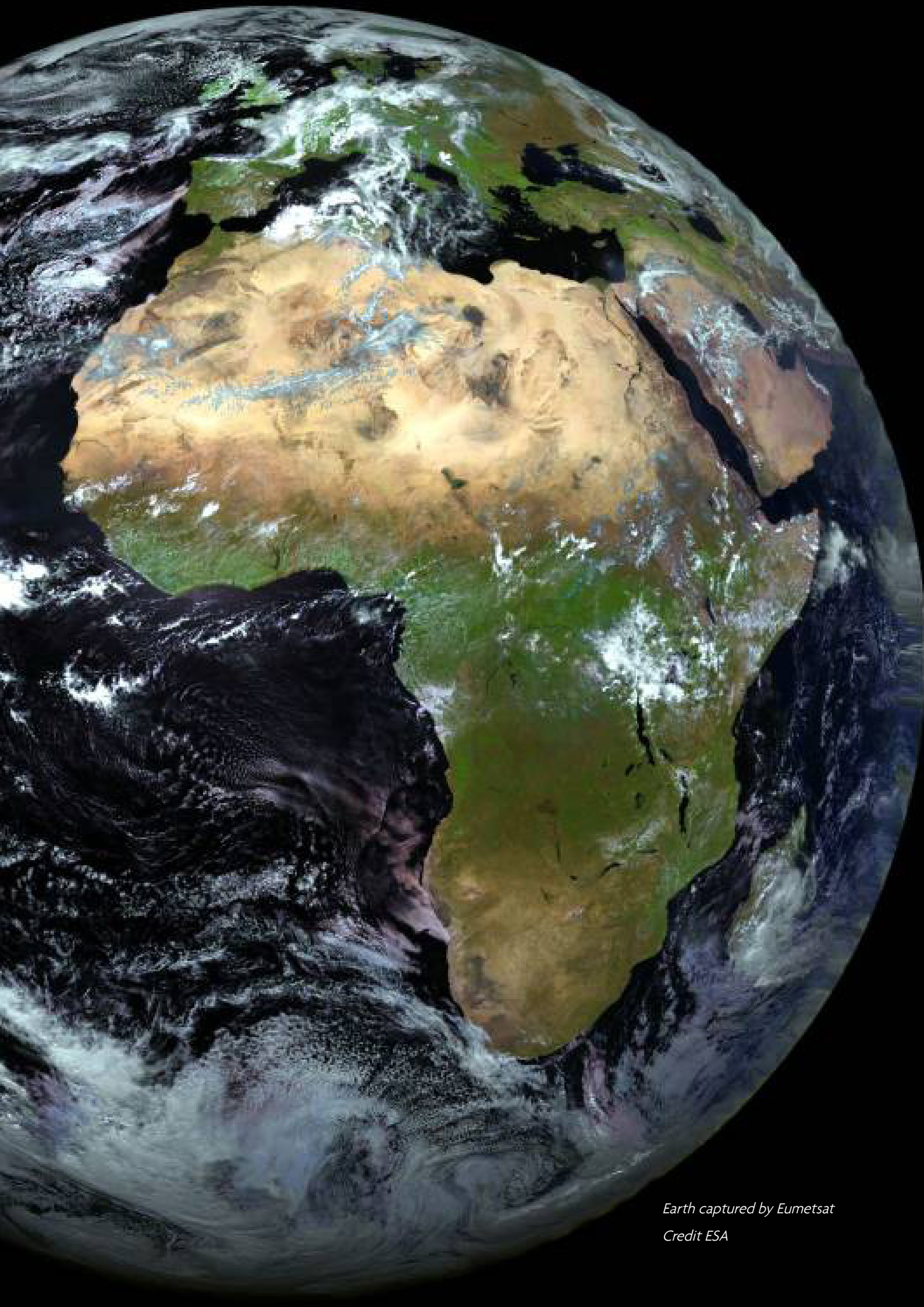


Dr David Parker

Chief Executive and Accounting Officer

23 June 2015





*Earth captured by Eumetsat
Credit ESA*

Remuneration Report

Senior Civil Service remuneration policy

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

BIS continues to run a Senior Remuneration Oversight Committee to advise ministers on managing the balance between public sector pay restraint and remuneration packages of all Senior Civil Servants (SCS) within the Department to ensure the right quality of leadership and specific skills needed by its partner organisations is achieved.

The Senior Civil Service pay system consists of relative performance assessments. Consolidated base pay awards are limited to a 1% increase to the Department's SCS paybill. No base pay increase is paid to those assessed to be the lowest 10% of performers or those receiving a salary in the upper quartile of their pay band.

Further information about the performance and reward arrangements for Senior Civil Servants can be found at www.civilservice.gov.uk/recruitment/working/pay-and-reward/scs-pay

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 otherwise be made.

Unless otherwise stated, the officials 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. Further information

about the work of the Civil Service Commission can be found at www.civilservicecommission.org.uk

The notice period for all Senior Civil Servants covered by this report is in line with the Civil Service terms and conditions.

Salary

Salary includes gross salary, overtime, reserved rights to London weighting or London allowances, recruitment and retention allowances, private office allowances and any other allowance to the extent that it is subject to UK taxation.

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. None of the Senior Civil Servants 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. They are limited to the top 25% of performers within the Department. Bonuses relate to the performance in the year in which they become payable to the individual.

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% of performers based on individual contributions to the Agency as formally assessed by the annual performance reviews.

In 2014/15 the Agency's employees on legacy terms were invited to harmonise onto BIS terms and conditions. 98% of employees opted to move and accepted the benefits package offered. Those that did not accept the offer will remain on their legacy terms.

In addition, the Agency introduced the Reward and Recognition Scheme during the year; which is a special bonus scheme for individual payments 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 total amount available is capped to 0.6% of the total annual paybill (excluding SCS pay).



Dr David Parker

Chief Executive and Accounting Officer

23 June 2015

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 (salary and benefits in kind) of Senior Civil Servants

Name	Salary ⁽ⁱ⁾ in bands of £5,000		Bonus payments to nearest £1,000		Benefits in kind to nearest £100		Pension benefits ⁽ⁱⁱ⁾ to nearest £1,000		Single total figure of remuneration in bands of £5,000	
	2014/15	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15	2013/14
David Parker	90-95	90-95	-	-	-	-	20	67	105-110	155-160
Peter Finn ⁽ⁱⁱⁱ⁾	60-65	10-15	-	-	-	-	54	8	115-120	15-20
Catherine Mealing-Jones ^(iv)	70-75	70-75	-	10	-	-	(10)	10	60-65	90-95
Chris Castelli ^(v)	70-75	65-70	2	-	-	-	16	18	90-95	80-85
Alice Bunn ^(vi)	40-45	not in post	-	not in post	-	not in post	15	not in post	55-60	not in post
Emma Lord ^(vii)	40-45	55-60	-	-	-	-	1	19	40-45	75-80
Richard Blayber ^(viii)	not in post	35-40	not in post	-	not in post	-	not in post	10	not in post	45-50

Notes:

i. Salary levels disclosed have been recorded on an actual basis.

ii. 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.

iii. Peter Finn was appointed as Chief Operating and Finance Officer with effect from 3 February 2014. A full year equivalent salary in 2013/14 would have been £60 - £65k.

iv. Catherine Mealing-Jones is on a 4-year loan from Home Office from 1 January 2012.

v. Chris Castelli was on a temporary promotion as Acting Director of Programmes from 23 November 2012. Through fair and open competition he secured the post of Director of Programmes on a SCS specialist grade from 18 November 2014. His 2014/15 salary includes an exceptional payment relating to buyout of legacy terms and conditions following the Agency's pay harmonisation.

vi. Alice Bunn was promoted to Director of Policy with effect from 1 May 2014 on a 0.7 FTE basis. A full time equivalent (FTE) annualised salary in 2014/15 would have been £60k - £65k.

vii. Emma Lord retired early on ill-health grounds with effect from 27 January 2015. Her 2014/15 salary includes payments in lieu of notice and accrued annual leave entitlement. A full time equivalent (FTE) annualised salary in 2014/15 would have been £55 - £60k.

viii. Richard Blayber was appointed as Acting Director of Policy and Operations with effect from 9 July 2013 to 31 March 2014.

	2014/15	2013/14
Band of highest paid Director's total remuneration ⁽ⁱ⁾	£90k - £95k	£90k - £95k
Median total remuneration ⁽ⁱⁱ⁾	£40,100	£43,300
Ratio	2.3	2.14

Notes:

- i. The highest paid director in 2014/15 was David Parker (2013/14: David Parker).
- ii. Remuneration is the total annual salary per employee as at 31 March 2015 and adjusted for Full Time Equivalent (FTE).

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

The banded remuneration of the highest-paid director in the Agency in the financial year 2014/15 was £90k - £95k (2013/14: £90k - £95k). This was 2.3 times (2013/14: 2.14) the median remuneration of the workforce, which was £40,100 (2013/14: £43,300).

In both 2014/15 and 2013/14, no employee received salary in excess of the highest-paid director.

Total remuneration includes salary, non-consolidated performance-related pay, benefits-in-kind and compensation payments. It does not include severance payments, 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 30 July 2007, civil servants may be in one of four defined benefit schemes: either a final salary scheme (classic, premium or classic plus); or the average career scheme (nuvos). These statutory arrangements payable under classic, premium, classic plus and nuvos are increased annually in line with Pensions Increase legislation.

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 1.5% and 6.85% of pensionable earnings for classic; and 3.5% and 8.85% for premium, classic plus and nuvos. 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. 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% (depending on the age of the member) into a stakeholder pension product chosen by the employee from a panel of three 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 to cover the cost of centrally-provided risk benefit cover (death in service and ill-health retirement).

Audited information continued

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 and 65 for members of nuvos; however this is under review.

Further details about the Civil Service pension arrangements can be found at www.civilservice.gov.uk/my-civil-service/pensions/index.aspx

New Career Average pension arrangements will be introduced from 1 April 2015 and the majority of classic, premium, classic plus and nuvos members will join the new scheme, alpha. Further details of this new scheme are available at www.civilservicepensionscheme.org.uk/members/the-new-pension-scheme-alpha/

Table 2: Pension benefits of Senior Civil Servants 2014/15

Name	Pension increase in real terms and (if applicable) related lump sum at retirement age in bands of £2,500 £000	Accrued pension at retirement age as at 31/3/2015 and (if applicable) related lump sum in bands of £5,000 £000	CETV at 31/3/2014 to the nearest £1,000 £000	CETV at 31/3/2015 to the nearest £1,000 £000	Real increase in the CETV as funded by the employer to the nearest £1,000 £000	Employer contribution to partnership pension account to the nearest £100 Nearest £100
David Parker	0 - 2.5	15 - 20	232	267	11	-
Peter Finn	2.5 - 5 plus lump sum 7.5 - 10	20 - 25 plus lump sum 65 - 70	307	358	35	-
Catherine Mealing-Jones	(2.5) - 0 plus lump sum (2.5) - 0	20 - 25 plus lump sum 65 - 70	336	346	(8)	-
Chris Castelli	0 - 2.5	0 - 5	37	55	10	-
Alice Bunn	0 - 2.5	5 - 10	not in post	47	5	-
Emma Lord ⁽ⁱ⁾	0 - 2.5 plus lump sum 0 - 2.5	10 - 15 plus lump sum 40 - 45	171	179	1	-
Richard Blayber	not in post	not in post	158	not in post	not in post	-

Note:

i. Emma Lord retired on ill-health grounds on 27 January 2015. The pension benefits disclosed are based as at this date.

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

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, Robert Douglas, receives additional £2,000 honorarium. 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	
			2014/15 £000	2013/14 £000
Robert Douglas	Chairman	Nov 2011 - Nov 2015	8	8
David Southwood	Non-Executive	Nov 2011 - Oct 2016	6	6
Baljit Dhillon	Chair of Audit Committee	Nov 2011 - Nov 2014	4	6
Sally Cantello	Non-Executive	Nov 2011 - Nov 2014	4	6
Clive Tucker ⁽ⁱ⁾	Chair of Audit Committee	Dec 2014 - Nov 2017	2	not in post
Frances Saunders ⁽ⁱ⁾	Non-Executive	Dec 2014 - Nov 2017	2	not in post

Note:

i. Honoraria are disclosed on an accrued basis.



Dr David Parker

Chief Executive and Accounting Officer

23 June 2015

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 UK Space Agency for the year ended 31 March 2015 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 Report that is described in that report 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 Strategic Report and Directors 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 UK Space Agency's affairs as at 31 March 2015 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 part of the Remuneration Report to be audited has been properly prepared in accordance with HM Treasury directions made under the Government Resources and Accounts Act 2000; and

- the information given in the sections of the annual report entitled Strategic Report and Directors Report for the financial year for which the financial statements are prepared are 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 part of the Remuneration Report to be audited are not in agreement with the accounting records and returns; or
- I have not received all of the information and explanations I require for my audit; or
- the Governance Statement does not reflect compliance with HM Treasury's guidance.

Report

I have no observations to make on these financial statements.

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

24 June 2015

Financial statements

Statement of Comprehensive Net Expenditure for the year ended 31 March 2015

	Note	Staff costs £000	2014/15 Other costs £000	Income £000	2013/14 £000
Administration costs					
Staff costs	3	1,863	-	-	1,629
Other administration costs	4	-	1,463	-	2,033
Programme costs					
Staff costs	3	1,330	-	-	1,279
Programme costs	5	-	311,914	-	317,807
Income from operating activities	6	-	-	(331)	(190)
Total		3,193	313,377	(331)	322,558
Net operating costs				316,239	322,558
Other comprehensive net expenditure		Note		£000	£000
Items that may be reclassified to net operating costs					
Net (gain)/loss on revaluation of available for sale financial assets ⁽ⁱ⁾	7			25,859	2,318
Total other comprehensive net expenditure for the year ended 31 March 2015				25,859	2,318
Total comprehensive net expenditure for the year ended 31 March 2015				342,098	324,875

Note:

i. The reported losses on revaluation of forward exchange contracts are notional losses caused by a fall 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 68-86 form part of these financial statements.

Statement of Financial Position for the year ended 31 March 2015

	Note	31 March 2015 £000	31 March 2014 £000
Current assets			
Trade and other receivables	8	41,124	12,294
Cash & cash equivalents	9	3,318	21,521
Total current assets		44,442	33,815
Current liabilities			
Trade & other payables	10	29,515	12,182
Other financial liabilities	7	22,855	1,875
Total current liabilities		52,370	14,057
Assets less liabilities		(7,928)	19,758
Taxpayers' equity			
General fund		14,927	21,633
Revaluation reserve		(22,855)	(1,875)
Total taxpayers' equity		(7,928)	19,758

The notes on pages 68-86 form part of these financial statements.



Dr David Parker
Chief Executive and Accounting Officer
 23 June 2015

Financial statements continued

Statement of Cash Flows for the year ended 31 March 2015

	Note	2014/15 £000	2013/14 £000
Cash flows from operating activities			
Net operating cost		(316,239)	(322,558)
Adjustments for non cash transactions	4	39	39
(Increase) / decrease in trade and other receivables	8	(28,830)	(621)
Increase / (decrease) in trade payables	10	17,333	6,302
Net cash outflow from operating activities		(327,697)	(316,838)
Cash flows from financing activities			
Funding from BIS		309,494	325,648
Net financing		309,494	325,648
Net increase / (decrease) in cash and cash equivalents in the period		(18,203)	8,810
Cash and cash equivalents at the beginning of the period	9	21,521	12,711
Cash and cash equivalents at the end of the period	9	3,318	21,521

The notes on pages 68-86 form part of these financial statements.

Statement of Changes in Taxpayers' Equity for the year ended 31 March 2015

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 cost	(316,239)	-	(316,239)
Non-cash adjustments			
Non-cash charges - auditors remuneration	39	-	39
Movements in reserves			
Additions		(139)	(139)
Disposals		4,879	4,879
Recognised in Statement of Comprehensive Net Expenditure	-	(25,720)	(25,720)
Balance at 31 March 2015	14,927	(22,855)	(7,928)

2013/14	General fund ⁽ⁱ⁾ £000	Revaluation reserve ⁽ⁱⁱ⁾ £000	Total £000
Balance at 1 April 2013	18,504	507	19,011
Net parliamentary funding - drawn down	325,648	-	325,648
Net operating cost	(322,558)	-	(322,558)
Non-Cash adjustments			
Non-cash charges - auditors remuneration	39	-	39
Movements in reserves			
Additions	-	(296)	(296)
Disposals	-	232	232
Recognised in Statement of Comprehensive Net Expenditure	-	(2,318)	(2,318)
Balance at 31 March 2014	21,633	(1,875)	19,758

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 68-86 form part of these financial statements.

Notes to the financial statements for the year ended 31 March 2015

1. Statement of Accounting Policies

1.1 Basis of accounting

These financial statements have been prepared in accordance with the 2014/15 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.

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

Derivative financial instruments comprise financial

instruments held to hedge foreign currency risk exposures and embedded derivatives in host contracts. Derivatives are initially recognised at fair value on the date a derivative contract is entered into and are subsequently re-measured at their fair value. The method of recognising the resulting gain or loss depends on whether the derivative is designed as a hedging instrument.

The resulting gain or loss is recognised in the Statement of Comprehensive Net Expenditure immediately unless the derivative is designated and effective as a hedging instrument, in which event the timing of the recognition in the Statement of Comprehensive Net Expenditure depends on the nature of the hedge relationship. The UK Space Agency designates certain derivatives as hedges of highly probable forecast transactions such as cash flow hedges.

The UK Space Agency uses derivative financial instruments to manage its exposure to foreign currency exchange and interest rate risks. The UK Space Agency does not hold or issue derivative financial instruments for trading purposes; however if derivatives do not qualify for hedge accounting, they are accounted for as such.

The UK Space Agency operate cash flow hedges to mitigate the risk of foreign exchange rate movements on the annual subscription payments payable in foreign currency at set points throughout the year.

Financial instruments held to hedge foreign currency risk exposures are designated as cash flow hedges if the criteria for applying hedge accounting under IAS 39 are met. The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges 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 in the Statement of Comprehensive Net Expenditure in the periods when the hedged item affects net operating costs.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in equity at that time remains in equity and is recognised when the forecast transaction is ultimately recognised in the Statement of Comprehensive Net Expenditure. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was reported in taxpayer's equity is immediately transferred to the Statement of Comprehensive Net Expenditure.

If the criteria for applying hedge accounting are not met, the gain or loss on derivative financial instruments is

credited or charged to the Statement of Comprehensive Net Expenditure instead of being deferred in taxpayer's equity.

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 and currently only holds financial assets at fair value through Statement of Comprehensive Net Expenditure.

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 is principally comprised of statutory licence fees for activities covered by the Outer Space Act 1986, co-funding income from other public sector bodies and charges for services provided, on a full cost basis, to external customers and public sector repayment work.

1. Statement of Accounting Policies continued

1.9 Administration and programme expenditure and income

The Statement of Comprehensive Net Expenditure is analysed between administration and programme income and expenditure. Administration costs reflect the costs of running the UK Space Agency, as defined under the Administration Cost-Control Regime, together with the associated operating income. Income is analysed in the Notes between that which, under the Regime, is allowed to be offset against gross administration costs in determining the outturn against the Administration Cost Limit, and that operating income which is not. Programme costs reflect non-administration costs, including payments, grants and other disbursements by the UK Space Agency, in support of policy initiatives.

1.10 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.

1.11 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.

1.12 Insurance

As an Executive Agency of the Department for Business, Innovation and Skills, the UK Space Agency, along with other public bodies of the Departmental group, do not generally insure. Insurance will only be obtained on items which, with the agreement of the Department, require it due to the risks involved. Insurance premiums are charged to the Statement of Comprehensive Net Expenditure. Staff travelling overseas on business are covered by the Department's insurance policy

for any medical costs incurred abroad, but are expected to take out their own travel insurance policy to cover any loss or damage to personal property. Claims directly related to business property are considered under BIS expenses policy guidelines.

1.13 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.

1.14 Pensions

UK Space Agency staff are covered by the provisions of the Principal Civil Service Pension Schemes (PCSPS) as described in Note 3. Both of the 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

1.15 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 2015 on an undiscounted basis.

1.16 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.

1.17 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 basis over the lease term.

1.18 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. See note 13 for further details.

1.19 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, there are separable operating segments on a geographical basis, namely National and International.

1.20 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).

1.21 Changes to International Financial Reporting Standards (IFRS) and 2014/15 Financial Reporting Manual (FReM)

The UK Space Agency provides disclosure that it has not yet applied a new accounting standard and known or reasonably estimable information relevant to assessing the possible impact that initial application of the new standard will have on the Accounts.

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).

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

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.

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.

	2014/15			2013/14		
	National segment £000	International segment £000	Total £000	National £000	International £000	Total £000
Gross expenditure	48,890	267,680	316,570	39,307	283,441	322,748
Income	(52)	(279)	(331)	(52)	(138)	(190)
Net operating costs	48,838	267,401	316,239	39,255	283,303	322,558

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 numbers and related costs

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 valuation carried out at 31 March 2007 recommended that the average employer contribution was set at 18.9% of pensionable pay. The last full actuarial valuation was carried out at 31 March 2012 and determined that from 1 April 2015 the average employer contribution will increase to 21.1% of pensionable pay. The contribution rates are set to meet the cost of the benefits accruing during 2014/15 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 at www.civilservice.gov.uk/pensions

For 2014/15, employer contributions of £463,373 were payable to the PCSPS (2013/14: £411,082) at one of four rates in the range 16.7% to 24.3% of pensionable

pay, based on salary bands. There were no prepaid contributions at 31 March 2015.

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 range from 3% to 12.5% of pensionable pay. Employer contributions also match employee contributions up to 3% of pensionable pay (the maximum possible employer contribution therefore is 15.5%). During 2014/15 no contributions were payable to partnership pension providers (2013/14: None). There were no prepaid contributions at 31 March 2015.

In addition, no employer mini-ASLC contributions (2013/14: None), set at 0.8% of pensionable pay regardless of salary bands, were payable to the PCSPS during 2014/15 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.

One individual (2013/14: None) retired early on ill-health grounds; the total additional accrued pension liability in the year amounted to £5,083.

There were no redundancy or other departure costs paid during the year (2013/14: None).

Analysis of staff costs between administrative and programme expenditure

	2014/15 £000	2013/14 £000
Administration	1,863	1,629
Programme	1,330	1,279
Total	3,193	2,908

3. Staff numbers and related costs continued

Analysis of staff costs

	2014/15			2013/14		
	Permanently employed £000	Other £000	Total £000	Permanently employed £000	Other £000	Total £000
Wages and salaries	2,375	-	2,375	2,040	-	2,040
Social security costs	214	-	214	190	-	190
Other pension costs	463	-	463	411	-	411
Net operating costs	3,052	-	3,052	2,641	-	2,641
Add cost of inward secondments	-	141	141	-	267	267
Total staff costs	3,052	141	3,193	2,641	267	2,908

Average number of persons employed

The average number of Full Time Equivalent (FTE) persons employed during the year were as follows:

	2014/15			2013/14		
	Permanently employed Number	Other ⁽ⁱ⁾ Number	Total Number	Permanently employed Number	Other ⁽ⁱ⁾ Number	Total Number
Administration	33.6	0.5	34.1	25.6	1.0	26.6
Programme	22.8	1.3	24.1	20.9	2.5	23.4
Total	56.4	1.8	58.2	46.5	3.5	50

Note:

i. In addition to the 1.8 FTE inward secondees in the above table, the UK Space Agency also benefited from an average of 6 FTE inward secondees (3.4 FTE in 2013/14) provided at nil cost by other government bodies and industry as part of their staff development programme.

4. Other administration costs

Administration costs	2014/15	2013/14
	£000	£000
Travel and subsistence	488	385
Payments for shared services ⁽ⁱ⁾	258	361
Conferences and education	161	140
Accommodation	154	152
Training and other staff costs ⁽ⁱⁱ⁾	93	31
Media and design	90	101
Technical contracts and contract management	52	171
Auditors remuneration (external)	39	39
Board members honoraria and fees	26	26
Auditors remuneration (internal)	22	13
Legal costs	22	23
Consultancy	13	131
Rentals under operating leases	13	6
Telecommunications services	7	13
Temporary staff costs	2	74
Civil Aviation Authority ⁽ⁱⁱⁱ⁾	-	338
Other	23	29
Total	1,463	2,033

Notes:

- i. Payments to shared services include the costs for services such as information technology, HR, finance, security and general overheads charges.
- ii. Staff training costs of £54k (2013/14: £22k) are in line with the increased number of employees and the Agency's continued commitment to provide personal development for all its staff. Other staff costs of £39k (2013/14: £9k) include expenditure such as health and safety, security clearance, recruitment assessment services and movements in the holiday pay accrual.
- iii. Payments to Civil Aviation Authority made in 2013/14 related to technical support in UK Government Review of Commercial Spaceplane and Space Port Operations.

5. Programme costs

	2014/15 £000	2013/14 £000
International subscriptions		
European Space Agency	269,987	267,503
Other international subscriptions	23	858
Net (gain) / loss on foreign exchange spot rate (non-hedge)	(3,142)	(1,165)
Other international grants and payments		
ESA mandatory tax adjustment ⁽ⁱ⁾	782	737
Other international grants	30	-
International bilateral agreements	-	15,500
National grants and other funding ^{(ii) (iv)}	41,449	31,992
Total subscriptions, grants and other funding	309,129	315,424
Operational costs		
Technical contracts and contract management	2,164	1,554
Rentals under operating leases ⁽ⁱⁱⁱ⁾	448	342
Media and design	72	13
Conferences and education ^(iv)	44	21
Travel and subsistence	14	32
Legal costs	5	60
Other ^(iv)	38	360
Total operational costs	2,785	2,383
Total programme costs	311,914	317,807

Notes:

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

iv. Some of the programme costs have been re-categorised from the presentation adopted in the 2013/14 Annual Report and Accounts to better reflect the nature of transactions disclosed under each expenditure heading.

6. Income from operating activities

	Note	2014/15 £000	2013/14 £000
European GNSS Agency rental income	14	279	138
Outer Space Act 1986 licence fees		52	52
Total		331	190

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 any currency fluctuation in relation to its international subscriptions payable to the European Space Agency. 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 Group is the use of forward contracts so as to provide greater budget certainty and therefore plan the future expenditure more effectively.

7. Other financial assets / liabilities continued

	2014/15 £000	2013/14 £000
Balance at 1 April 2014	(1,875)	507
Additions (new contracts entered into in year)	(139)	(296)
Disposals (contracts settled in year) ⁽ⁱ⁾	4,879	232
Revaluation movement ⁽ⁱⁱ⁾	(25,720)	(2,318)
Transfer to / from current assets ⁽ⁱⁱⁱ⁾	-	176
Transfer to / from non-current assets ⁽ⁱⁱⁱ⁾	-	(176)
Balance at 31 March 2015	(22,855)	(1,875)
Non-Current (Liabilities) / Assets	-	-
Current (Liabilities) / Assets	(22,855)	(1,875)
Total	(22,855)	(1,875)

Notes:

- i. The disposal value arose through the completion of contracts number 10, 11, 13 - 19 recorded in the 'Contracts outstanding at 31 March 2015' table. The sum of the unrealised gain/(loss) for each of these contracts is the value which was recognised in reserves and is removed on completion.
- ii. Revaluation movement represents the difference in the fair value of the contracts still in place at 31 March 2014 and 31 March 2015. The GBP to EUR forward rate moved on average from 1.20 to 1.37 in 2014/15.
- iii. Transfer to/from current and non-current assets is the reclassification of existing contracts at 31 March 2014 between less and more than one 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.

The disposal is effectively a notional value as this clears the reserve balance when the contract is completed. The tables below include details of historic disposals and the corresponding notional reserve movements in the accounts for each financial year.

On acquisition and at the reporting date the hedges met the IAS 39 effectiveness criteria (i.e. in comparing the

discounted cost of the contract with the discounted current market valuation, both prospective and retrospective tests of effectiveness were within the 80% - 125% tolerance range).

On 10 December 2010 UKSA entered into eleven forward contracts for subscriptions payable to the European Space Agency up to 2014. Nine forward contracts were settled during financial years 2011/12, 2012/13 and 2013/14, with the final two contracts reaching settlement during the reporting period.

On 10 January 2014 the Agency entered into six forward contracts. All of these contracts reached settlement during the reporting period.

On 17 June 2014 the Agency entered into four forward contracts. One contract was settled during the reporting period. The remaining three contracts will reach settlement between 1 June 2015 and 1 February 2016. The total cost of the outstanding contracts is £223,835,400, and their fair value at 31 March 2015 was £200,980,865. There has therefore been a negative movement on the derivatives reserve as at 31 March 2015 of (£22,854,535).

Contracts outstanding at 31 March 2015 (NB listed in chronological order)

Contract	Currency	Date contract placed	Euro to GBP contract rate	Settlement date	Cost £000	Euro to GBP rate at 31 March 2015	Fair value at 31 March 2015 £000	Gain / (loss) to reserves £000	Unrealised gain/(loss) in the reporting period £000
Footnote	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)
10	Euro	15/12/2010	1.1792	02/06/2014	31,699	-	-	-	(778)
11	Euro	15/12/2010	1.1773	01/10/2014	31,751	-	-	-	(800)
13	Euro	10/01/2014	1.2055	02/06/2014	26,046	-	-	-	(72)
14	Euro	10/01/2014	1.2061	02/06/2014	5,450	-	-	-	(12)
15	Euro	10/01/2014	1.2042	01/10/2014	26,075	-	-	-	(75)
16	Euro	10/01/2014	1.2048	01/10/2014	5,450	-	-	-	(13)
17	Euro	10/01/2014	1.2021	02/02/2015	33,692	-	-	-	(2,122)
18	Euro	10/01/2014	1.2026	02/02/2015	7,029	-	-	-	(440)
19	Euro	17/06/2014	1.2461	02/02/2015	19,759	-	-	-	(567)
Contracts settled in 2014/15 (ix)(a)									(4,879)
20	Euro	17/06/2014	1.2418	01/06/2015	78,342	1.3799	70,501	(7,841)	(7,802)
21	Euro	17/06/2014	1.2358	01/10/2015	78,342	1.3763	70,346	(7,997)	(7,948)
22	Euro	17/06/2014	1.2286	01/02/2016	67,151	1.3719	60,134	(7,017)	(6,975)
									Adjustment for interim value on disposed contract no 17
									(2,017)
									Adjustment for interim value on disposed contract no 18
									(421)
									Adjustment for interim value on disposed contract no 19
									(557)
Current liabilities (ix)(b)					223,835		200,981	(22,855)	(25,720)
Total outstanding contracts					223,835		200,981	(22,855)	(25,720)

Notes:

- i. All the forward exchange contracts are in Euro.
- ii. Date contract placed is the date the forward exchange contracts were created.
- iii. Euro to GBP contract rate is the translation rate for each contract, agreed on creation of the contract, which will determine how much is paid on settlement of the contract.
- iv. Settlement date is the date that the contract is completed and paid.
- v. Cost is the amount paid, in pound sterling, on the settlement date.
- vi. Euro to GBP rate at 31 March 2015 is the future forward market rate at close of trading for the relevant forward exchange contracts settlement dates. These are indicative rates provided by the Bank of England and form the basis of the fair value calculation, see note (vii). There are no official close of trading rates for forward contracts.
- vii. Fair value at 31 March 2015 is the fair value of the contract translated at the indicative future forward market rate at the close of trading on 31 March 2015, see note (vi).
- viii. Gain/(Loss) to reserves is the difference between the fair value at 31 March 2015 and the cost to settle the forward exchange contract. This is the total value of the unrealised gain or loss for the outstanding forward exchange contracts.
- ix. There are 2 sections to this heading. (a) For contracts settled in this or previous years, the amount relating to the settlement of contracts in year reflects the amount released via reserves and equates to the "disposal" value. (b) In year unrealised gain/(loss) on revaluation is the difference in fair values of the outstanding contracts at the year end compared to the fair values of the previous financial year end and equates to the "revaluation movement". In the case of new contracts placed in year it is the difference in fair values at year end compared to the fair values recognised at inception.

7. Other financial assets / liabilities continued

Contracts outstanding at 31 March 2014 (NB listed in chronological order)

Contract	Currency	Date contract placed	Euro to GBP contract rate	Settlement date	Cost £000	Euro to GBP rate at 31 March 2014	Fair value at 31 March 2014 £000	Gain / (loss) to reserves £000	Unrealised gain/(loss) £000	
Footnote	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	
1	Euro	15/12/2010	1.1932	01/06/2011	54,597		-	-	2,926	
2	Euro	15/12/2010	1.1927	03/10/2011	54,620		-	-	2,858	
3	Euro	15/12/2010	1.1918	01/02/2012	46,853		-	-	2,363	
Contracts settled in 2011/12									8,147	
4	Euro	15/12/2010	1.1910	01/06/2012	50,886		-	-	(200)	
5	Euro	15/12/2010	1.1901	01/10/2012	50,929		-	-	(158)	
6	Euro	15/12/2010	1.1871	01/02/2013	43,762		-	-	(166)	
Contracts settled in 2012/13									(524)	
7	Euro	15/12/2010	1.1851	03/06/2013	34,076		-	-	117	
8	Euro	15/12/2010	1.1833	01/10/2013	34,129		-	-	117	
9	Euro	15/12/2010	1.1812	03/02/2014	29,305		-	-	(447)	
12	Euro	04/12/2013	1.2044	03/02/2014	26,853				(19)	
Contracts settled in 2013/14									(232)	
10	Euro	15/12/2010	1.1792	02/06/2014	31,699	1.2089	30,922	(778)	(871)	
11	Euro	15/12/2010	1.1773	01/10/2014	31,751	1.2077	30,952	(800)	(882)	
13	Euro	10/01/2014	1.2055	02/06/2014	26,046	1.2089	25,974	(72)	(41)	
14	Euro	10/01/2014	1.2061	02/06/2014	5,450	1.2089	5,437	(12)	(6)	
15	Euro	10/01/2014	1.2042	01/10/2014	26,075	1.2077	25,999	(75)	(16)	
16	Euro	10/01/2014	1.2048	01/10/2014	5,450	1.2077	5,436	(13)	(1)	
17	Euro	10/01/2014	1.2021	02/02/2015	33,692	1.2058	33,587	(105)	32	
18	Euro	10/01/2014	1.2026	02/02/2015	7,029	1.2058	7,010	(19)	10	
			Adjustment for interim value on disposed contract no 9							(543)
Current liabilities					167,192		165,317	(1,875)	(2,318)	
Total outstanding contracts					167,192		165,317	(1,875)	(1,774)	

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 risk.

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

a) Analysis by type

Trade and other receivables less than one year	31 March 2015 £000	31 March 2014 £000
Trade receivables	1,872	1
Other receivables	25	12
Prepayments and accrued income	39,164	12,181
VAT	63	100
Total receivables	41,124	12,294

b) Intra Government balances

Trade and other receivables less than one year	31 March 2015 £000	31 March 2014 £000
Balances with BIS Group	58	125
Balances with other central government bodies	64	100
Balances with local authorities	-	-
Balances with NHS trusts	-	-
Balances with public corporations and trading funds	-	-
Balances with bodies external to government ⁽ⁱ⁾	41,002	12,069
Total receivables	41,124	12,294

Note:

i. Balances with bodies external to government include a prepayment made to the European Space Agency of £39,105k (2013/14: £12,057k). The significant increase in the size of the prepayment was caused by a change in the payment profile adopted by the European Space Agency in 2015, where subscriptions payable in February now represent 40% of total annual subscriptions payable to ESA (2013/14: 30%).

9. Cash and cash equivalents

Cash and cash equivalents	31 March 2015 £000	31 March 2014 £000
Government banking service	3,318	21,521
Total	3,318	21,521

10. Trade payables and other current liabilities

a) Analysis by type

Trade and other payables less than one year	31 March 2015 £000	31 March 2014 £000
Trade payables	204	16
Other payables	288	267
Accruals and deferred income	29,023	11,899
Total payables	29,515	12,182

b) Intra Government balances

Trade and other payables less than one year	31 March 2015 £000	31 March 2014 £000
Balances with BIS Group	906	723
Balances with other central government bodies	2	53
Balances with local authorities	-	-
Balances with NHS trusts	-	-
Balances with public corporations and trading funds	55	-
Balances with bodies external to government ⁽ⁱ⁾	28,552	11,406
Total receivables	29,515	12,182

Note:

i. Balances with bodies external to government include accrued expenditure in respect of payments to the European Space Agency of £24,366k (2013/14: £3,480k), various national programme grants of £1,390k (2013/14: None) and University of Leicester of £636k (2013/14: None).

11. Capital commitments

There were no capital commitments as at 31 March 2015 (2013/14: 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

internal subscription payments. The payments to which the Agency is committed, analysed by the period during which the commitment expires, are given below:

	2014/15 £000	2013/14 £000
Not later than one year	223,835	167,192
Later than one year and not later than five years	-	-
Total	223,835	167,192

13. Contingent liabilities disclosed under IAS 37

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 the UK Government against any proven third party costs. This is an unlimited liability on licensees. Since it is not possible to insure an unlimited risk, there is a requirement on licensees to obtain third party liability insurance (usually to a minimum of 60 million euro) for the duration of the licensed activity, with the UK Government a named beneficiary. The UK Government is exposed to a potential liability for third party costs which are not recoverable from the licensee. This liability is unquantifiable at time of reporting.

During 2014/15, a prospective amendment to the Outer Space Act 1986 was made, which will come into force from 1 October 2015 (common commencement date).

Licensees' currently unlimited liability for third party costs will be capped to 60 million euro for the majority of missions. This amendment was designed to adequately balance the risk to the UK Government whilst ensuring UK space operators remain competitive internationally.

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.

14. Operating leases

14.1 Obligations under operating leases

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

Offices	2014/15 £000	2013/14 £000
Not later than one year	466	453
Later than one year and not later than five years	1,931	1,896
Later than five years	6,059	6,611
Total	8,456	8,960

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 2014/15, the total lease payments charged to the Statement of Comprehensive Net Expenditure were £447,890. These charges were fully paid by 31 March 2015.

ii. In 2014/15 the UK Space Agency had two short-term lease agreements with the Science and Technology Facilities Council (STFC) for office accommodation at the Electron Building based within the Harwell Oxford campus. On 1 April 2014 the UK Space Agency entered into a short-term lease agreement for a lease term up to 30 June 2014 at the cost of £2,800. On 10 July 2014 the UK Space Agency entered into a new lease agreement extending the lease at the Electron Building (office No.34) until 31 March 2017 at the cost of £11,329 per annum, to be reviewed annually in line with the movements in RPI. In 2014/15, the total lease payments charged to the Statement of Comprehensive Net Expenditure were £13,176. These charges were fully paid by 31 March 2015.

14.2 Operating leases granted

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

Offices	2014/15 £000	2013/14 £000
Not later than one year	284	280
Later than one year and not later than five years	1,209	1,193
Later than five years	3,915	4,272
Total	5,408	5,745

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 has no security of tenure after the lease expires on 31 December 2030. The agreed rental charges are £275,207 per annum, to be reviewed annually in line with the movements in RPI. In 2014/15, the total lease income charged to the Statement of Comprehensive Net Expenditure was £278,679.

15. 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.

16. Related party transactions

During 2014/15, 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, Engineering and Physical Sciences Research Council, and Innovate UK.

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
David Southwood	Trustee for the National Space Centre	Programme expenditure	103
Sally Cantello	Chairman of Advisory Board, Surrey Space Incubator, University of Surrey	Programme expenditure	50

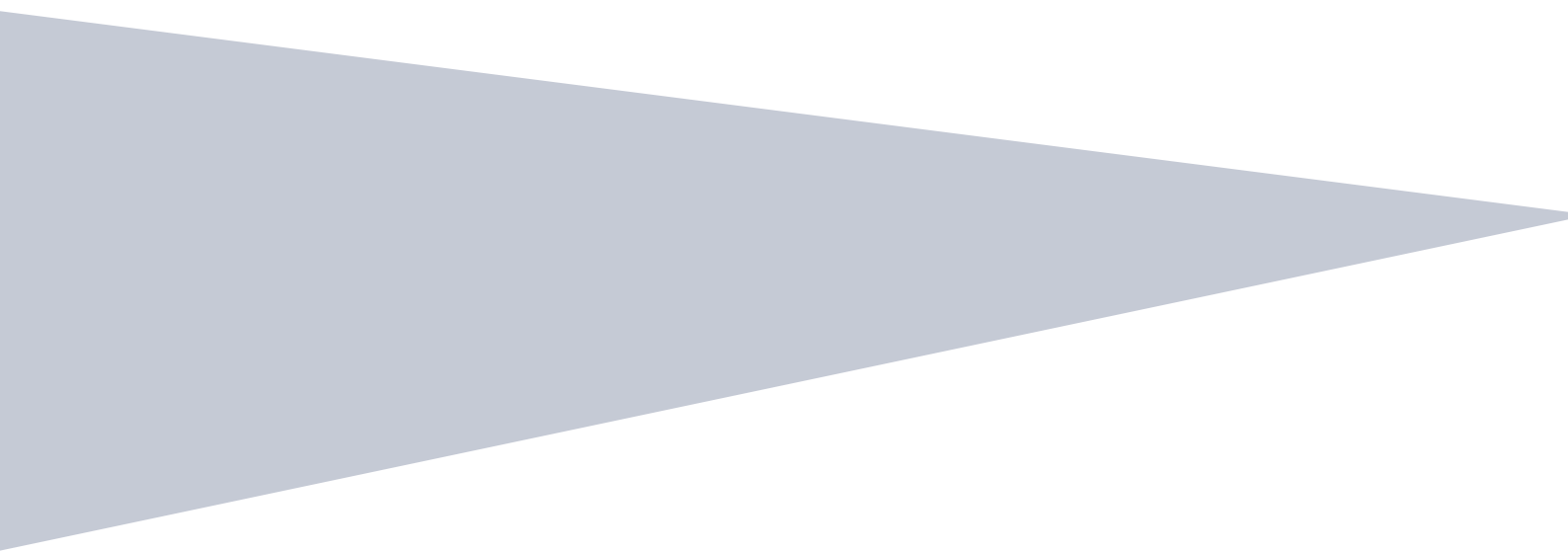
17. Losses and special payments

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

18. Events after the reporting period

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

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



Policy & Regulation



Satellites used for precision agriculture



Inmarsat's Alphasat launch in 2013
The Agency regulates UK space activity by licensing under the Outer Space Act.
Credit: ESA

Applications & Services



Satellites used for town planning. Credit: Satellite Applications Catapult



Flooding in Sussex, image taken by the UK DMC2 satellite

Business Growth



Tim Peake will be flying to the ISS in Nov 2015. Credit: ESA

Education & Skills

The UK Space Agency is developing space weather monitoring capability and ensuring the UK is more resilient to disruption from Space Weather. Credit: ESA

Technology & Innovation



The ExoMars rover, the first European Rover being developed by Airbus Defence and Space. Credit: ESA

Science

Security of space from space





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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

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