



Corporate Plan

2017-18

Contents

Ministerial Foreword	3
Introduction	5
Policy principles	7
Promote	9
Safeguard	11
Grow	13
Cooperate	15
Critical enablers	17
Performance management	18
Our KPIs	19
Finance	21
Glossary	22

Ministerial Foreword



I am pleased to introduce the UK Space Agency's Corporate Plan for 2017-18.

Space is crucial to the daily life of UK citizens. It underpins our food distribution, finance and telecommunications industries, and energy supply and transport networks. The UK's Critical National Infrastructure is reliant on the space sector for defence, the emergency services, weather forecasting, environmental monitoring, flood response and other essential functions.

UK leaders in space industry and academia are responsible for ground-breaking, innovative developments and technologies used to solve some of the most pressing global challenges of our time. It is also an economic and industrial success story. The government is committed to an economy that works for all, as part of its Industrial Strategy. The UK space sector underpins industries worth more than £250 billion to the UK economy¹, employing people in every corner of the UK and has enormous potential to grow further.

The UK Space Agency's vision remains to support UK industry to capture 10% of the global space market by 2030. Ensuring the UK space industry is well placed as a global leader in the decades ahead.

The UK Space Agency was established to lead and foster the growing UK space sector, delivering benefits to public services, science and innovation, national security and the wider economy.

The UK Space Agency is responsible for UK civil space programmes, covering policy, regulation and delivery. It is responsible for the transposition of international UN treaties to UK legislation. The Agency coordinates closely with other government departments providing a single voice for UK civil space ambitions.

¹Size & Health of the UK Space Industry 2016 (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/575804/LE-SHUKSI_2016-INFOGRAPHIC-FINAL_S2C171116.pdf)

The government's National Space Policy (published in 2015)² set out the four policy principles that will guide the Agency's work on space as follows:

Promote

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

Safeguard

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

Grow

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

Co-operate

Commit to co-operating internationally to create the legal frameworks for the responsible use of space and for collaborating with other nations to deliver maximum benefit from UK investment in space.

This Corporate Plan sets out the proposed actions the UK Space Agency will take over the coming year to deliver these against these policy principles. In particular it highlights the four Key Performance Indicators (KPIs) that we will prioritise in 2017-18 as follows:

- Publish a Space Growth Strategy
- Deliver space regulatory reform
- Enable commercial access to space through a Satellite Launch Programme
- Oversee ground-breaking national and international programmes (including UK leadership role in European Space Agency)

Jo Johnson
Minister of State for Universities, Science, Research and Innovation.

March 2017

² National Space Policy (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/484865/NSP_-_Final.pdf)

Introduction

The UK Space Agency is an executive agency of the Business, Energy & Industrial Strategy Department (BEIS) and lies at the heart of UK efforts to exploit and benefit from investment in space technologies and satellite applications. The UK Space Agency was created on 1 April 2011, and for the first time integrated UK civil space policy and the majority of space programme funding from across government, the Research Councils and Innovate UK.

The Agency sets the civil space policy landscape for the UK and develops regulation and licensing regimes for UK space activities. The Agency leads on behalf of government to assure the resilience of space infrastructure, including assets forming part of the UK's Critical National Infrastructure.

We promote space science and innovation 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.

Overseeing a large number of national and international programmes, the Agency aims to facilitate growth of the UK space sector, deliver significant export opportunities for UK industry and build relationships with international partners.

The Agency currently employs approximately 100 staff. This includes secondees from other government departments and industry providing additional subject matter skills, knowledge and expertise. Staff are based primarily at the headquarters in Swindon and at two other sites in Harwell (near Oxford) and London.

Governance

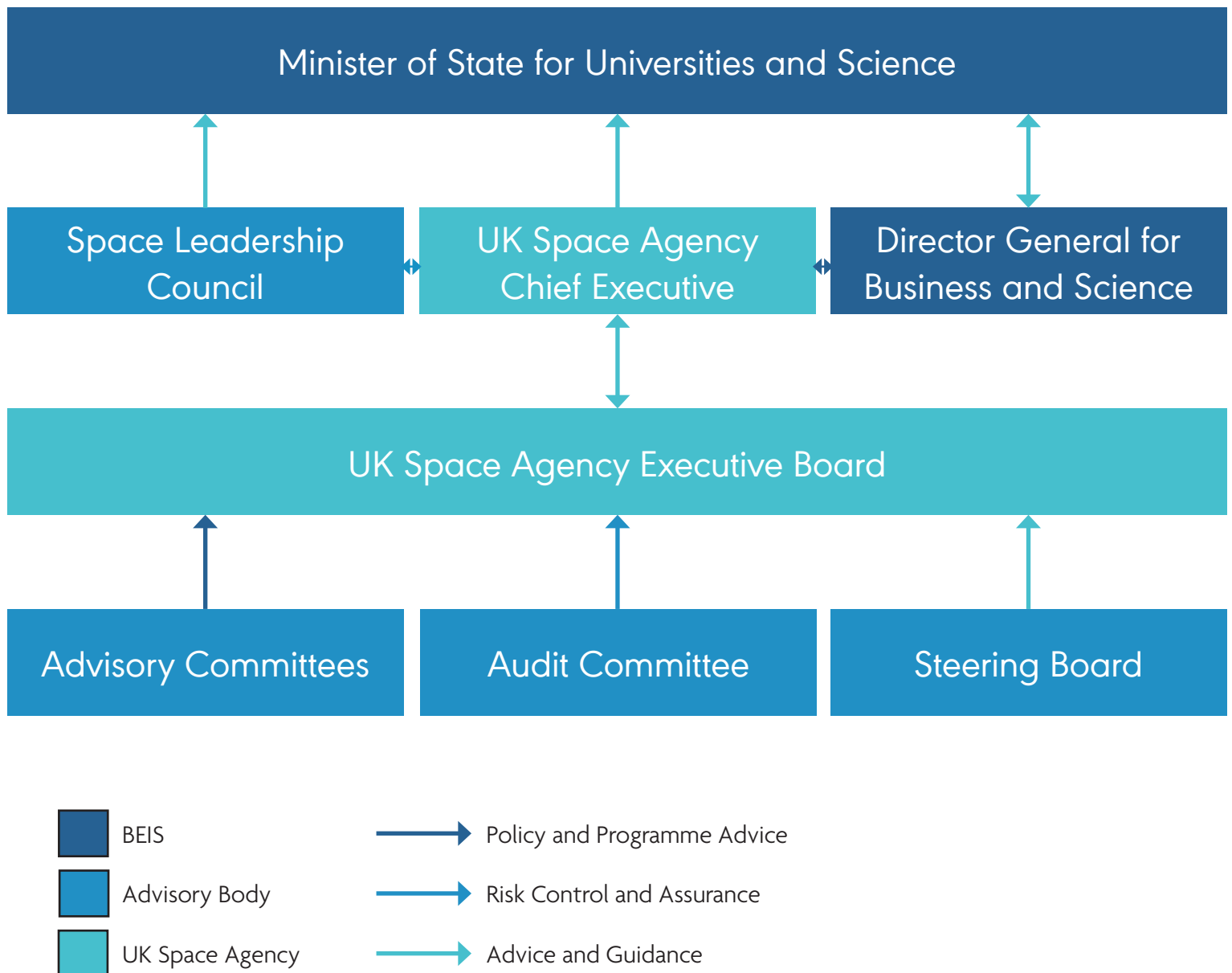
The diagram on the opposite page illustrates the advice and governance structure of UK Space Agency. The Agency Chief Executive receives strategic advice and guidance from the Agency's Steering Board and risk control and assurance from its Audit Committee. The UK Space Agency also receives programme advice from the space community across the UK via a set of advisory bodies that include representatives from industry, academia and public bodies including Research Councils*, Innovate UK* and other government departments. We will actively engage with the development of UKRI and the changing research funding landscape.

* From summer 2017 the UK Research & Innovation (UKRI) will be established as a single, strategic body that will bring together the 7 Research Councils, Innovate UK and the research funding from Higher Education Funding Council for England (HEFCE).

BEIS

The UK Space Agency is responsible for its own policy development, working closely with its BEIS partners to ensure consistency and coherence with BEIS policies. The Business and Science Group within BEIS acts as the Agency's sponsor, determining the overarching framework within which Agency objectives and targets are set.

Figure 1: UK Space Agency Governance



Policy principles

The UK Space Agency was established to deliver an excellent space programme with the maximum economic, scientific and policy benefit for the UK. To do this the Agency delivers a targeted programme of research and development, innovation and science funding and oversight to drive economic growth through exploitation of space infrastructure, services and data.

The government is committed to delivering a modern Industrial Strategy that addresses long-term challenges and opportunities for the whole UK economy. The direction of this strategy reinforces the UK Space Agency's vision to support UK industry to capture 10% of the global space market by 2030. This vision was endorsed in the government's National Space Policy (2015), which set out high-level plans to:

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

Safeguard: Commit to preserving and promoting the safety and security of the unique space operating environment, free from interference.

Grow: Support the growth of a robust and competitive commercial space sector, underpinned by excellent academic research.

Co-operate: Commit to cooperating internationally to create the legal frameworks for the responsible use of space and for collaborating with other nations to deliver maximum benefit from UK investment in space.

Since the National Space Policy was published we have developed a much clearer understanding of what these principles will mean in practice and the direction the Agency's work should take to deliver them. The UK Space Agency will lead on and oversee many projects over the coming year that will help us deliver our vision to increase the UK's space economy.

The Agency is working with industry, academia and government to develop a new Space Growth Strategy which will, in a changing environment, identify the key levers to growth in the context of the four policy principles set out in the National Space Policy. As part of this the Agency will receive proposals on a Sector Deal for the space and satellite sector to support the work of the Industrial Strategy.

The UK Space Agency will also work closely with the Department for Exiting the EU and other Government Departments to achieve the best possible outcome for the UK space sector following the vote to leave the European Union.

In addition to addressing the four policy principles the Agency must also maintain focus on its Critical Enablers which includes the management of our valuable people resources. These Critical Enablers are essential for delivering our vision and achieving the ambitions set out in our policy principles.

Figure 2: Overview of the Agency's KPIs

What we will deliver (set out in the National Space Policy).	Purpose	Delivering an excellent space programme with the maximum economic, scientific and policy benefit for the UK.			
	Vision	Support UK industry to capture 10% of the global space market by 2030.			
	Policy priorities	Promote	Safeguard	Grow	Cooperate
How we will deliver (set out in Corporate Plan 2017-18).	KPIs	<p>Satellite Launch Programme Enable commercial access to space from the UK.</p> <p>Space Growth Strategy The UK Space Agency will publish a Space Strategy to set out how they will achieve the policy principles set out in the 2015 National Space Policy. As part of this we are looking forward to receiving proposals on a Sector Deal for the space and satellite sector to support the work of the Industrial Strategy.</p> <p>National and International Programmes Manage and monitor delivery of the UK government's strategic (civil) space science, innovation and R & D programmes.</p> <p>Space Regulatory Reform Reform the UK's space regulatory regime to deliver sustainable growth in the space sector, whilst protecting the space operating environment and managing Government's long term risks.</p>			
	Critical enablers	People, infrastructure, finance.			

Since last year we have reviewed our KPIs ensuring they represent our top priorities. We have also reviewed the PIs that underpin them to ensure that they can be delivered within the resources and finances that the Agency has available. While we haven't detailed the underpinning PIs in this plan the Agency has worked hard to ensure there is a strong system of governance and accountability in place to ensure their effective and efficient delivery.

Promote

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

We believe that space holds the key to vast additional societal, security and economic benefits for the UK as we move towards an ever more digitised society. Today our everyday lives depend on space technology, it is woven into society. We rely on satellites to connect and support our everyday lives including, forecasting the weather, managing our finances, accessing the internet, expanding broadband coverage, enabling trade, delivering television signals, underpinning national security and assisting aid efforts. The UK Space Agency will drive the use of innovative services through the following programmes.

Earth Observation (EO)

The Agency will oversee the development of a broad and deep EO community. Promoting EO within the public and private sector to create a vibrant market that will manage the entire spectrum of issues from early research and technology development, through manufacture and launch, through the infrastructure needed to move, check and share the data into a format suitable for use. The Agency will support the export of UK based EO technologies worldwide.

Space Enabled Applications

In an information based society the UK Space Agency leads activities to encourage the use of space enabled data by individuals. This is intended to support industry to enhance and increase the Applications and Services sector in the UK, with particular focus on finance, commercialisation and awareness of space data and opportunities.

Space for Smarter Government Programme (SSGP)

Our Space for Smarter Government Programme (SSGP) exists to help the public sector work more efficiently and effectively by using space data and services. SSGP works alongside public sector bodies to raise awareness of what satellites can do and how they could be used and how they could be adopted,

in some cases helping to demonstrate the capability where there is a requirement and no current market offering. This generates direct benefits for those working within the public sector but also stimulates the sector and acts as an enabler to wider UK industrial growth and export opportunities.

Communications

The UK Space Agency will continue to carry the flag for space in the UK nationally and internationally, highlighting UK success stories through delivery of high-profile media and events. We will run campaigns to build momentum behind the UK's story in space, coordinating with our partners across the UK space sector and with ESA.

Education and Skills

Through promoting the value and importance of the UK space sector the Agency hopes to help inspire the next generation of space scientists and engineers. The UK Space Agency will also assess and review the skill needs of the UK space industry. This will support the Agency's aim to improve the provision of advice on space-related careers and ultimately encourage and support the use of space as an inspiring context for learning across all age groups.



Inspiring the next generation

The Principia mission sparked national inspiration, putting space science and technology at the forefront of schools across the UK. From growing space seeds and coding computers, to exercising like an astronaut and making films - young people are engaged in a new era of space education. We are seizing this enthusiasm to help shape the space scientists and engineers of tomorrow.

Safeguard

The UK Space Agency commits to preserving and promoting the safety and security of the unique space operating environment, free from interference.

With our increasing dependency on space-enabled data and services, the UK Space Agency is taking steps to safeguard the integrity of the data and security of space assets to protect our national interest. Without secure access to space services, our ability to manage transport, freight and communications systems, synchronise networks, predict the weather, and coordinate emergency services would be severely diminished. As society's dependence on space-enabled systems increases, we will continue to work towards assuring national resilience and continued access to these services.

Space Regulation

The Agency will continue to transform the UK space regulatory regime to establish a supportive and enabling framework that drives growth whilst managing the government's long term liabilities and taking due account of international and national obligations. As the UK space sector continues to grow and innovate, it is critical that the UK's regulatory framework keeps pace with these technological advances. The Agency will develop its regulatory framework to meet these challenges.

Space is a global business. The UK Space Agency will continue to lead and shape international thinking, working with partners overseas, hand in hand with its evolving domestic legislation. The UK is committed to promoting a sustainable, safe, secure and peaceful space environment.

We are working in partnership with the Department of Transport to ensure the successful passage of the Spaceflight Bill, which was published in draft in February 2017. The Spaceflight Bill and supporting regulations will provide a proportionate, supportive and enabling legal framework for launch and suborbital spaceflight operations from the UK. It will balance public safety and national security with the UK's international obligations and compliance with the UK's other legislative requirements, including environmental protection.

Space Security

We will build on government's commitments in the Strategic Defence & Security Review. As the space environment becomes increasingly congested, we will work to mitigate the impact of threats and hazards in space. We will work in partnership with other countries, UK government departments, and commercial operators to protect spacecraft from the threat of future collisions, addressing our regulatory requirements while enabling growth. We will also work to improve our ability to predict and respond to future severe space weather events.

The space sector was designated as a critical national infrastructure sector in 2015 and the UK Space Agency named as the responsible lead government department. We will work to identify dependencies, assess critical assets and build sector resilience. We will develop a cross-sector security and resilience plan that outlines our approach.

Access to radio spectrum resource is an essential requirement for successful operations in space. It enables satellite communications and broadcasting, remote sensing, space research and satellite navigation. We will work with industry, government departments, Ofcom and internationally to support the continued security of access to spectrum supporting UK activities in space.

Cross Government Ministerial Oversight - Space Security & Prosperity

The Agency will continue to support the work of the Ministerial Committee on Space Security & Prosperity, established in 2016 and chaired by the Minister responsible for civil space policy. This committee brings together 16 government departments to set the government's strategic ambition for space, promoting growth and enhancing security by driving the development and implementation of coherent cross-government strategies and policies. This committee is vital to resolving the challenges and realising opportunities arising from new innovations in space including mega-constellations and the UK's emerging space launch capability.



Space surveillance and tracking

On behalf of the UK, we are working with the European Union to build a capability for the observation and monitoring of satellites and space debris. The EU Space Surveillance and Tracking programme coordinates data from national radar and optical sensors. This data is used to prevent the collision of operational spacecraft, protecting the services they deliver to government, industry and the public.

Grow

The UK Space Agency supports the growth of a robust and competitive commercial space sector, underpinned by excellent academic research.

We are aiming to make the UK the most attractive place for space businesses of all sizes to set up and thrive. The Agency recognises the vital role that commercialisation of science and new technologies play in our future growth and will continue to provide businesses with the environment and infrastructure necessary to generate large scale innovation in areas where there are higher risks and wider benefits, as is characteristic of the space sector. This includes:

Space Growth Partnership

The UK's space industry and UK Space Agency have established a Space Growth Partnership that will jointly plan for and deliver high levels of sector growth and social benefits to the UK. Analysis and recommendations from the Partnership will feed directly into the Agency's Space Growth Strategy.

Satellite Launch

The UK Space Agency is working closely with industry and local enterprises to establish new markets in the UK to launch small satellites and offer sub-orbital spaceflights for science and tourism. The Agency is working across government to establish a new legal framework to regulate these services. The Department for Transport recently published the draft Spaceflight Bill, which outlines the Government's approach. And in February the Agency invited industry to develop their detailed plans to offer launch services at UK spaceports from 2020, and submit proposals for how government funding could support them.

Space Science and Exploration Programme

We will work directly with the European Space Agency (ESA) to undertake frontier scientific research. Supporting this strong 'science-driven' programme will provide the best tools to the UK scientific community to sustain its excellence in space science and exploration. The scientific questions addressed by this programme range from the origin of the universe itself through its evolution to the

formation of stellar systems and planets and the emergence of life-supporting environments. Such topics have an enormous ability to inspire but these missions also challenge our scientists and engineers because of their complexity and thus act as a driver of new technology and innovation in the sector.

Regional Growth

As part of its Industrial Strategy the government is committed to an economy that works for all. Local and regional growth has an essential role to play in developing the space sector - and there is increasing interest in space across the length and breadth of the country. Supporting the development of the sector across the UK also provides an important route to reach out to local clusters in other sectors where space can enable innovation and new market opportunities.

Harwell is a focal point for growth for the space sector - providing national facilities and expertise of benefit to the whole of the UK. The space community at Harwell has grown significantly and the campus now homes over 60 space organisations employing over 700 staff.

The Agency will further support the development of clusters around existing and new space assets in industry and academia, replicating the "Harwell effect".

Satellite Navigation

We will work with our international and domestic partners to promote the downstream benefits and applications of satellite navigation systems in diverse areas such as automobile navigation, precision agriculture, aviation, health and disaster monitoring and assistance. The Agency will seek to create the conditions to enable UK industry to continue to be at the forefront of Global Navigation Satellite Systems (GNSS) manufacturing and development during this corporate period. This will help support the Agency's vision to grow the UK space economy to £40bn by 2030. We will continue our work to ensure the UK is an early adopter of the encrypted Public Regulated Services (PRS), providing data to our key public services.



Enabling small satellite launch and sub-orbital flights

Our Satellite Launch Programme is helping to grow the UK space sector by enabling small satellite launch and sub-orbital flights from the UK. These markets will allow launch vehicles to put small satellites into orbit, and take scientific experiments and people to the edge of space. These new markets will see the development of UK spaceports, and the growth of domestic supply chains and supporting services.

Cooperate

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

The Agency will increase its international collaboration on development and participation in space missions and applications. The Agency will maintain its international collaboration on development and participation in space missions and applications and look to develop new international relationships where it makes sense to do so. Space is ungoverned by any single nation. Nations around the world have to share the space environment. The cost of space programmes also means it often makes sense to share the necessary infrastructure and development costs of instruments. Without sovereign governance, international consensus is required to promote the right regulatory framework in space and the cornerstone of international space law remains the United Nations' 1967 Outer Space Treaty. The regulation of space activities is rooted in the importance of countries playing by the same rules and we will continue to take a balanced approach to regulation, ensuring that it is proportionate and commensurate with the nature of the space programme it addresses, in terms both of scale and risk.

European Space Agency

We will continue to work closely with the European Space Agency (ESA) to finalise plans for the UK's new package of investment with ESA. The Agency will contribute €1.4 billion over the next five years to ESA programmes, this will ensure the UK continues to have a leadership role in world-leading science, continued ESA support to grow the UK space industry, support to the next phase of the ExoMars programme, UK leadership of ESA's climate change monitoring programme and access to ESA's International Space Station and human spaceflight programme.

EU Space Programmes

The UK has played a major part in the development of the EU space programmes and the government has said that it intends to continue to collaborate with our European partners on major science and innovation initiatives.

International Partnership Programme

The Agency will lead on utilising UK expertise in space data applications and satellite technology to help with key developmental challenges faced by emerging and developing economies around the world. The programme will show that space solutions can be a cost-effective way of delivering towards the United Nations Sustainable Development Goals through developing long-term partnerships that provide a sustainable economic or societal benefit for the countries we are working with.



Using Earth observation to protect and restore rainforests

A £23.8 million project funded through our International Partnership Programme aims to protect and restore up to 300 million hectares of tropical forests across Indonesia, Brazil, Mexico, Colombia, Ghana and Kenya. Earth observation data is being used to improve national forest monitoring systems for the use of governments, universities and non-governmental organisations.

Critical enablers

Delivering our vision and ensuring the UK Space Agency operates efficiently and effectively.

Delivery of the four UK Space Agency policy principles is underpinned by our people, systems and processes. These critical enablers allow us to operate efficiently and effectively.

People

The Agency's most valuable resource is its staff. The UK Space Agency is committed to maintaining investment in our staff to develop new skills and undertake continuing professional development to sustain existing skills. The UK Space Agency has set out its ambitions for taking this forward in our 'People Strategy'.

In delivering this strategy, the UK Space Agency will work with our staff and wider stakeholders to ensure that it meets both the needs of the business and also the interests of the individuals working within the Agency. The key themes are:

- Leadership and Management
- Learning and Development
- Resources and Performance Management
- Reward and Recognition

Agency staff have developed a People Focus group which regularly reviews staff survey results and proposes improvement actions in line with the themes above.

Finance

The Agency's finance leads provide financial support and advice across the Agency to underpin sound financial decision making; maximising value for money and ensuring financial activity is underpinned by an effective controlled environment.

IT, Telecommunications

The UK Space Agency relies on BEIS, as our sponsoring government department, to provide our ICT systems. These systems are accredited to store and process protectively marked information or business critical data via cross government networks.

Accommodation

The Agency rents accommodation across three UK sites:

Swindon

Our headquarters, co-located with seven UK research councils, Innovate UK and Research England from Higher Education Funding Council for England (HEFCE) that will be merged to form the UK Research and Innovation Organisation.

Harwell

Leading science, innovation, technology and business campus, located just south of Oxford.

London

The Agency maintains a presence in London in our sponsor department, BEIS.

Performance management

We have four KPIs shown in the 'KPIs' section. The Agency also monitors performance with a series of Performance Indicators (PIs) which, although not published within this corporate plan, are managed on a monthly basis within the Agency's performance dashboard.

The Agency reports monthly on its performance to its Executive Board, quarterly to the Agency's Steering Board, and at quarterly meetings with our BEIS sponsor team.

We review our KPIs and underpinning PIs at least once a year to ensure consistency with available resources, priorities and government policy. These PIs allow Agency staff to see how their personal effort contributes to Agency Outcomes, and explains our progress to stakeholders, customers and to BEIS.

Our KPIs

The UK Space Agency has four KPIs which are our priority actions for the coming year. The KPI measures have been agreed by the Agency's Executive Board and sponsor team. They aim to give a high level overview of our key actions over the coming year.

Satellite Launch Programme

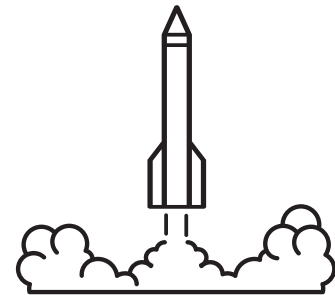
Enable commercial access to space from the UK.

Milestone

Complete initial market engagement and identify opportunities to support launch capability development by Q2.

Objective

This programme is a key driver of growth in the UK space sector, aiming to enable commercial operators to launch small satellites and offer sub-orbital spaceflights for science and tourism from 2020.



Space Growth Strategy

The UK Space Agency will publish a Space Strategy to set out how they will achieve the policy principles set out in the 2015 National Space Policy. As part of this we are looking forward to receiving proposals on a Sector Deal for the space and satellite sector to support the work of the Industrial Strategy.

Milestone

Support Industry and Academia to develop proposals for a Space Sector Deal under the Government's Industrial Strategy by Q4.
Publish the new Space Growth Strategy by Q4.

Objective

Bring together government, industry and academia around key strategic commitment to achieve the policy principles set out in the 2015 National Space Policy.



National and International Programmes

Manage and monitor delivery of the UK government's strategic (civil) space science, innovation and R&D programmes.

Milestone

Monitor all projects to assure that they managed within approved performance, time and cost parameters as agreed by the Agency - reported on monthly through Performance Assurance Reports.

Objective

We will oversee the performance, funding and risks in delivering the agency's national and international programmes to derive maximum benefit.



Space Regulatory Reform

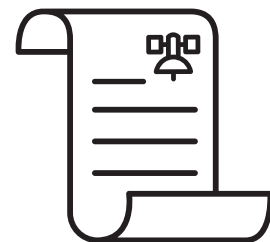
Reform the UK's space regulatory regime to deliver sustainable growth in the space sector, whilst protecting the space operating environment and managing Government's long term risks.

Milestone

Develop risk assessment methodologies - by Q4
Agree joint delivery of regulatory operating procedures between the Agency, CAA and HSE - by Q4

Objective

We will execute our existing regulatory responsibilities efficiently and effectively while working to reform the UK's space regulatory regime to ensure sustainable growth in the space sector, whilst protecting the space operating environment and managing government's long term risks.



Finance

The UK Space Agency has an administration budget allocation which includes the costs of providing the policy and regulation functions. It also includes the costs associated with administering the UK Space Agency, such as HR, IT, finance, communications, and legal.

We do not own any assets (e.g. property, plant) and

pay rent on our accommodation. Our national and international activities in support of research and innovation programmes are funded through our programme (resource) and capital allocations.

The Agency will continue to closely scrutinise its programme budget, to ensure continued value for money and efficient allocation of resources.

Figure 3 – UK Space Agency Budget Allocations

Allocation by Departmental Expenditure Limit (DEL) & Annually Managed Expenditure (AME)	2016/17 Est Outturn £m	2017/18 Plan £m
DEL Resource & Development Allocation - Programme	216.4	220.9
DEL Resource & Development Allocation - Administration	3.7	3.5
DEL Capital Allocation	157.6	162.4
AME ²	- 61.0	N/K
Total	316.7	386.8

Figure 4 – UK Space Agency Expenditure by Category

Allocation by Expenditure Category	2016/17 Est Outturn £m	2017/18 Plan £m
International Subscriptions	303.8	288.9
National Programme	68.0	91.9
Operating & Other Costs	5.9	6.0
AME	- 61.0	N/K
Total	316.7	386.8

Glossary

BEIS	Business, Energy and Industrial Strategy
CMin	Council of Ministers
DEFRA	Department for the Environment, Food and Rural Affairs
DfE	Department for Education
DfT	Department for Transport
DFID	Department for International Development
EO	Earth Observation
ESA	European Space Agency
FCO	Foreign and Commonwealth Office
MoD	Ministry of Defence
NSP	National Space Policy
SSGP	Space for Smarter Government Programme

