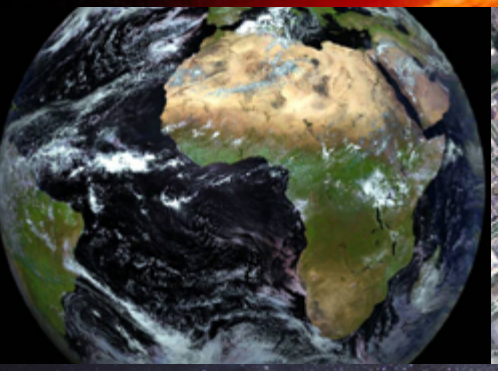
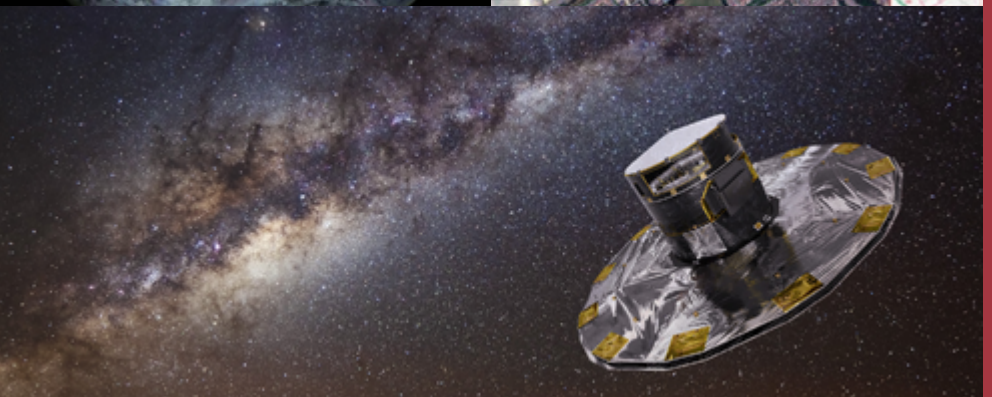
UK SPACE AGENCY

UK Space Agency Corporate Plan 2015 -2016





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Foreword

This Corporate Plan looks ahead to the 2015/16 fiscal year and beyond and allows our partners and stakeholders in the space sector to see how we are planning to realise our vision. This Corporate Plan and the current Civil Space Strategy 2012-2016 should be read in conjunction with each other. Our aspirations are fully aligned with the BIS 'Our plan for growth: science and innovation' strategy.

The UK Space Agency has seen many positive changes over the last year including a restructure of the organisation to strengthen both policy and programme delivery, an increase in our emphasis on sector growth and the implementation of a full senior leadership team. With the general election scheduled in 2015 we are likely to face fresh challenges.

The space sector is now worth £11.3 billion annually to the UK economy. This represents about 6.5% of the global space and services market, but we want to grow that to around 10% by 2030; boosting the economy to £40 billion a year. This remains at the forefront of all that we do. It is an ambitious target, but one that we are on track to meet.

A growing space economy creates new opportunities for the UK to exploit. For example, we are helping government increase its awareness and use of satellite data; providing a joined up and prioritised approach to exports and inward investment across the space sector working with HMG partners as well as managing a new portfolio of international space projects.

Our ever increasing societal dependence on space programmes is recognised by recent policy work to map our dependence on space assets. We are committed to seizing the opportunities for growth of the sector across the UK, taking measures to ensure our space infrastructure is safe and resilient, and operating a regulatory regime that strikes the right balance between delivering growth objectives and meeting our international security objectives.

Dr David Parker, Chief Executive, UK Space Agency

With these aspirations and challenges in mind I have agreed with my Executive Board and Steering Board that we will be concentrating on 5 Key Performance Indicators (KPIs) over the 2015/2016 financial year. These KPIs will be supported by the Performance Indicators (PIs) listed in Annex 1.

- **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 economy** – Having better evidence ensures that we more effectively deliver our policies and programmes to achieve our goals.
- **Implement the UK strategy for 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 level 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 level.

In 2014/15 we made great progress at the ESA Ministerial where we were able to pledge extra investment of over £200 million for Europe's space programmes. This will strengthen the UK role in commercial telecommunications, integrated applications of space data, and both robotic and human space exploration, importantly securing UK leadership of the Mars rover development within Europe's 2018 Mars mission. These actions cement the UK's position as the forward-looking and business-friendly 'place for space'.

Chief Executive, UK Space Agency
March 2015

In last year's Corporate Plan I mentioned that we would be publishing the National Space Security Policy and the Government's response to the Space Growth Action plan. These documents can now be found on the Agency's website along with 2014's UK Space Industry: Size and Health study and the Space Growth Action Plan. The National Space Policy will be published early in the 2015 financial year.

In 2015 we will start analysis leading to the next UK Civil Space Strategy for the period 2016 – 2020, allowing us to continue to mature the plan to meet our ambitious targets, including industry's interim target of a £19 billion space economy by 2020.

To supplement the expertise of our strengthened team at the Agency, we work collaboratively with our partners in government, industry and academia as well as internationally; primarily through the European Space Agency (ESA). The progress we are making would not be possible without the professionalism and dedication of the whole UK space community.

The Mars Yard at Airbus Defence & Space with ExoMars Rover prototypes. CREDIT: Max Alexander/UK Space Agency

Introduction

Our mission is to grow the UK space economy to capture 10% of the global space-enabled market by 2030. To do this, the UK Space Agency leads and fosters the UK space sector, delivering benefits to public services, science and innovation, national security and the wider economy.

Our work involves action in many different ways. We set the civil space policy landscape for the UK and develop regulation and licensing regimes for UK space activities. We invest alongside business to de-risk new space technology and coordinate technology standards that keeps 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 cost, complexity and duration of space activities lend themselves well to international collaboration. Consequently we often work in partnership with other countries, agencies and organisations. For example, where we do invest, it is often via the European Space Agency (ESA). This enables UK industry and academia to work in collaboration with Europe, developing world leading technologies, services and science missions. We also lead the UK's engagement with the satellite programmes of the European Union including Galileo and Copernicus, working in partnership with other government departments who will use space data in their policy work.

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. Thus, our communications and education programmes set out to increase the general public's understanding of space and its practical benefits and inspire the next generation of UK scientists and engineers.

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.

The UK Space Agency provides the strategic approach to the management and funding of all civil space activity. This Corporate Plan is for our sponsors, staff and stakeholders; it sets out what we will deliver in 2015/16 to advance the UK Space Agency's work, realise the Government's commitment to the Civil Space Strategy and to contribute to wider government objectives on economic growth.

To deliver our mission we have 6 outcomes which support the UK Civil Space Strategy:

Outcome 1

We will have clear and established space policies and policy positions

Outcome 2

UK space policies and policy positions will be effectively represented at a national and international level

Outcome 3

The UK will maintain and grow its national capability in space

Outcome 4

UK investment in civil space will be effective, targeted and will deliver tangible economic or scientific benefit

Outcome 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

Outcome 6

The UK Space Agency will have the operational capability, capacity and culture to deliver the Civil Space Strategy

Vision 'the what'	A £40 billion a year space economy by 2030
Mission 'the how'	Deliver an excellent space programme with the maximum economic, scientific and policy benefit for the UK
Outcomes 'the what'	6 Outcomes 1. We will have clear and established space policies and policy positions 2. UK space policies and policy positions will be effectively represented at a national and international level 3. The UK will maintain and grow its national capability in space 4. UK investment in civil space will be effective, targeted and will deliver tangible economic or scientific benefit 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 6. The UK Space Agency will have the operational capability, capacity and culture to deliver the Civil Space Strategy
Pathways 'the how'	6 Pathways to Growth 1. Growth through new opportunities 2. Growth from export 3. Innovation supporting growth 4. Science to underpin growth 5. Education for growth 6. Growth through smarter government
KPIs 'the measures of success'	5 KPIs 1. Achieve the best value for money outcome for the UK space sector from the next Spending Review 2. Improve evidence on the value added of the UK Space Agency to the UK economy 3. Implement the UK strategy for Earth Observation from space 4. Exploit the education and inspiration value of Tim Peake's six-month 'Principia' mission to the International Space Station 5. Successful delivery at the local, national, European and global level by collaborating with others

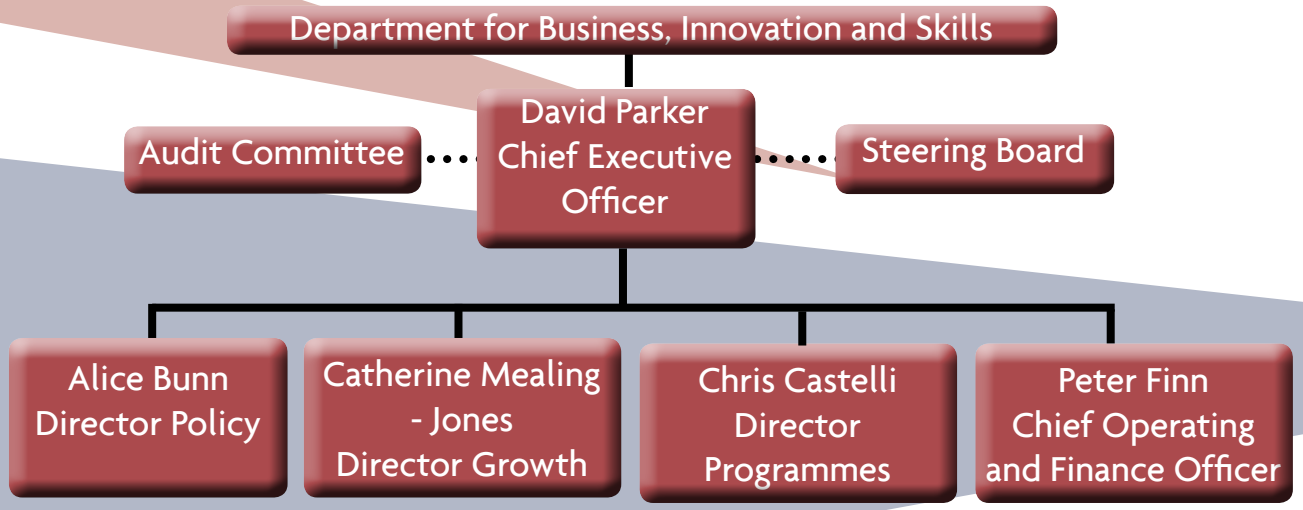
Who We Are

The UK Space Agency is an executive agency of the Department for Business, Innovation and Skills (BIS) and lies at the heart of UK efforts to exploit and benefit from investment in space technologies and satellite applications. We were created on 1 April 2011, and for the first time integrated UK civil space policy and the majority of programme funding from across Government, the Research Councils and Innovate UK (formerly known as the Technology Strategy Board).

Dr. David Parker was appointed Chief Executive of the UK Space Agency in January 2013. The Chief Executive Officer is advised by four independent members of the Steering Board; currently Rob Douglas CBE (Chair), Prof. David Southwood, Dr. Frances Saunders CB, and Clive Tucker, plus Bev Thomas (the sponsor representative for BIS). The UK Space Agency receives programme advice from the community via a set of advisory bodies that include representatives from industry, academia and public bodies such as the Research Councils, Innovate UK and other government departments including Defra, MoD, DECC, FCO and DfE. High level space policy advice is provided to the Minister by the Space Leadership Council.

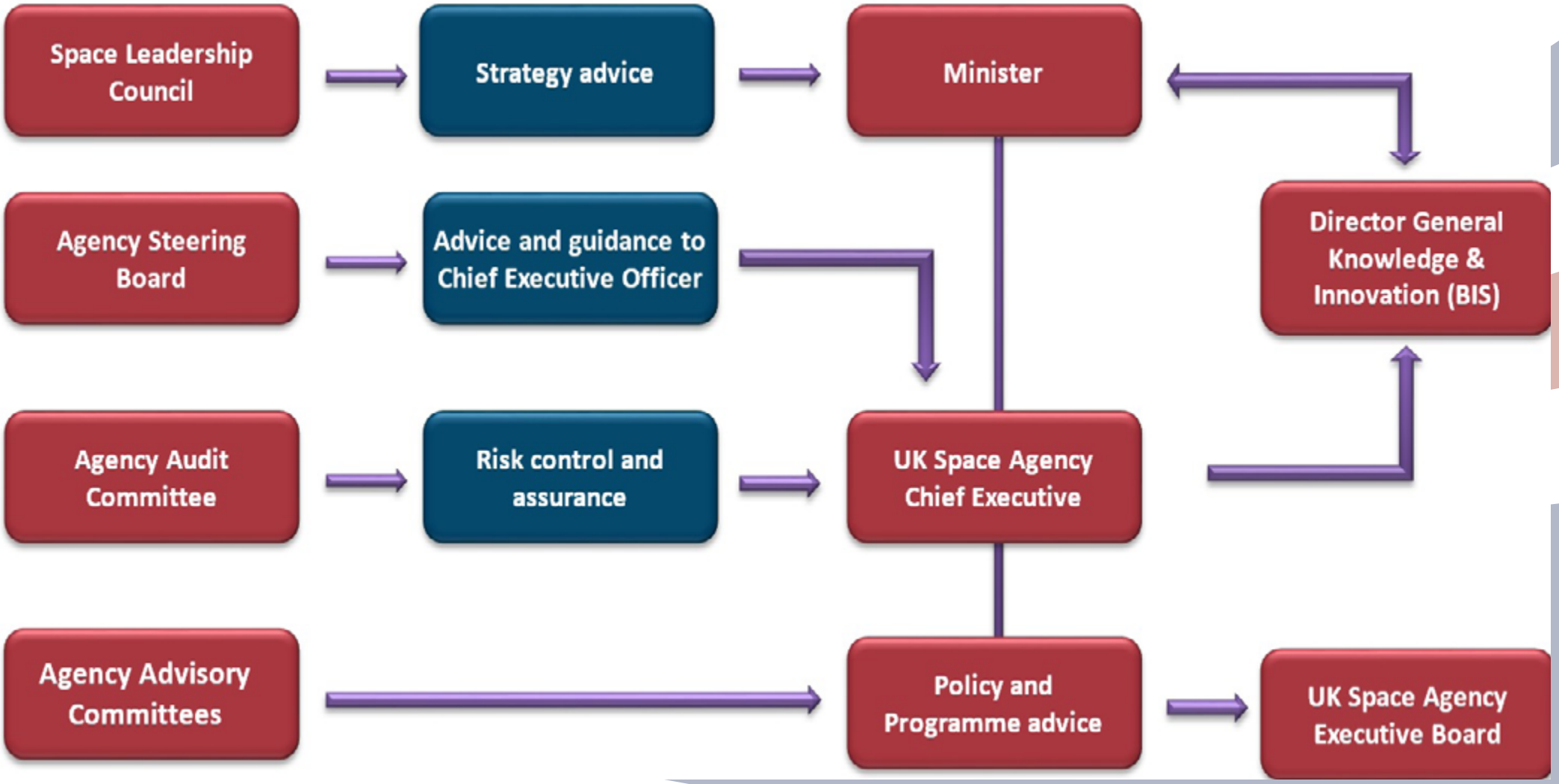
The UK Space Agency currently employs 70 full-time equivalent (FTE) staff. Given the breadth of our agenda, its specialist nature and the size of the Agency, individual staff work across multiple Outcomes. Our staff include secondees from other organisations and industry with a range of expert skills and knowledge. Staff are based primarily at the headquarters in Swindon and at two smaller units in Harwell (near Oxford) and London. The UK Space Agency is organised into four directorates: Policy; Growth, Programmes; and Operations and Resources.

High level structure of the Agency



Advice and governance for the CEO and Agency

The diagram below illustrates the advice and governance that the Agency receives. The Minister receives strategic advice from the Space Leadership council. The CEO receives advice and guidance from the Agency Steering Board and risk control and assurance from the Agency Audit Committee. The Executive Board are advised through a suite of thematic advisory committees. See our website for further information on our governance arrangements.



Strategic Overview

The UK Space Agency was established to lead and foster the growing UK space sector. This sector, now worth £11.3 billion annually to the economy (compared to £9.1 billion in the 2012 Size and Health Survey), continues to grow at a rate of more than 7% per annum. Over 34,000 people are currently employed in the space sector and the Space Growth Action Plan envisions this growing to 100,000 by 2030. [1]

According to the 2014 Size and Health Survey, industry turnover will need to grow by an average of 8.7% per year to reach the target of £19 billion by 2019/20. We will be investing in many projects over the next year which advance the UK's space economy, build facilities in the UK and use UK scientists and industry to supply instruments and technology on space missions. In 2015/16, these highlights will include:

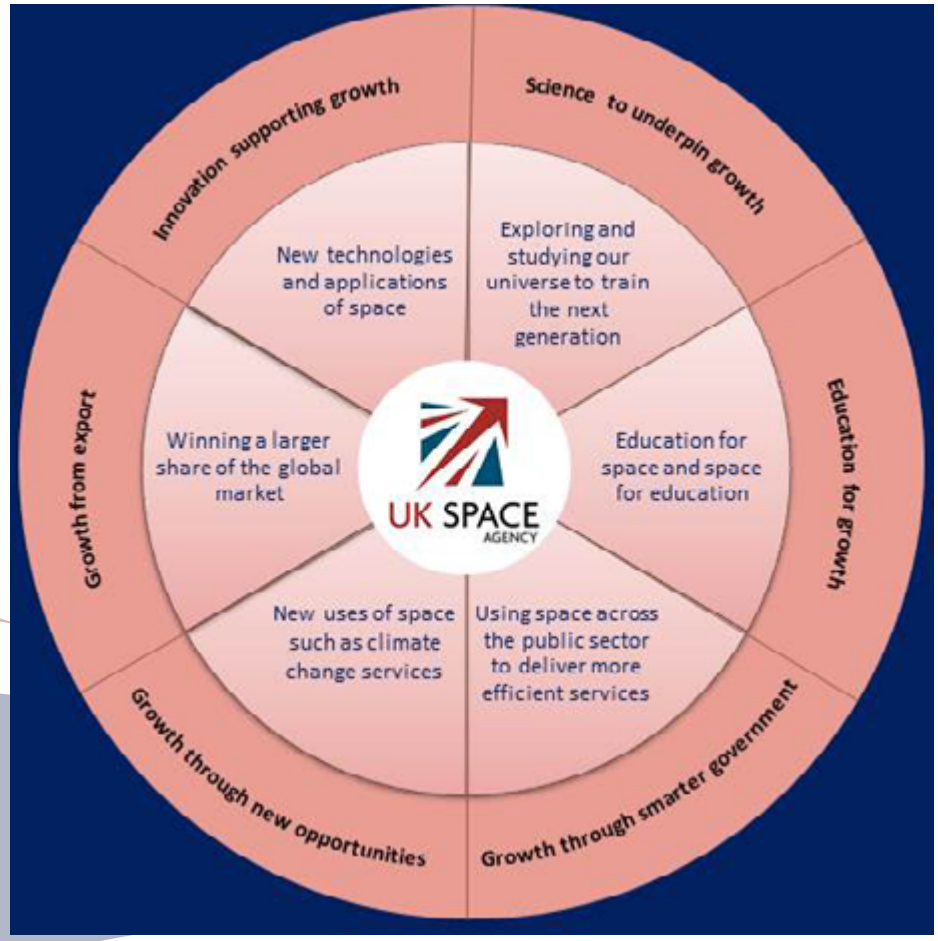
- NeoSat, a next generation telecom satellite platform
- A collaborative ground segment to exploit the Copernicus Earth observation satellites
- Phase 2 of the National Space Technology Programme
- The two-step Mars exploration programme, ExoMars
- Multiple projects within our pilot International Partnership Space Programme
- A larger Space for Smarter Government programme, which drives the take up of space data across departments, local government and delivery agencies
- New national space propulsion test facilities

Just as importantly, we are actively engaged in regulatory, security and international diplomacy advancements which are the essential enablers for the delivery of the sector growth targets.

Our work would not be possible without our close relationship with European partners. We will continue to engage strongly with the space programmes of both the EU and ESA to maximise their benefit to the UK.

We continue to operate in a challenging fiscal environment where it is essential that we demonstrate progress towards the sector's ambitious growth targets. As part of our work for the next Parliament we will be working to better demonstrate the value added of each pound of tax payers' money spent in the space sector. We will also be developing and maintaining an effective and up-to-date evidence base, strengthening the Agency's ability to undertake economic analysis and enabling evidence-based decision making, improving policy design and reducing risk.

Our growth vision will be realised via the six growth pathways. We use these growth pathways in conjunction with our six outcomes as shown schematically on page 7.

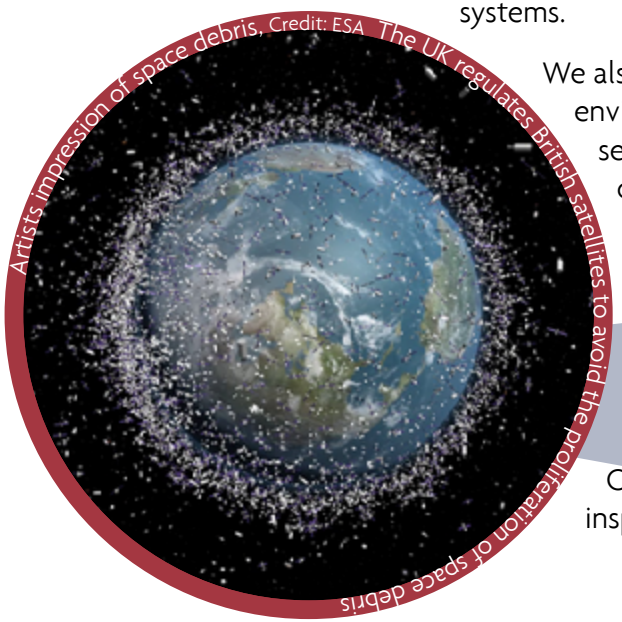


[1] The Size and Health of the UK Space Industry, Oct 2014

Our Approach

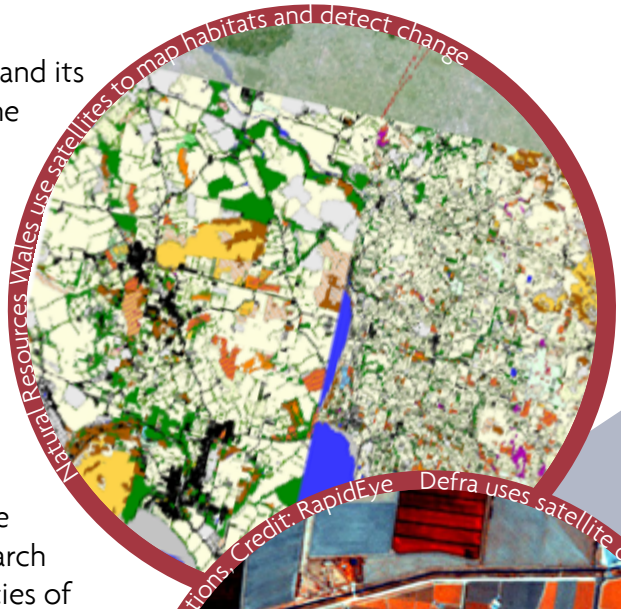
Investment is targeted at areas that have the greatest potential for delivering benefits to public services, science and innovation, national security and the economy. We provide coherence between investment in long-term basic research and near-term applications in order to harness the skills of universities, national facilities and industry to create a strong national capability. Cutting edge science and innovation cannot happen without modern infrastructure. The UK Government has committed £5.9 billion (Science and Innovation strategy) to support science capital from 2016 to 2021 which includes long term commitment to space programmes, providing continued confidence for science, research and innovation. We are building links between industry and the research community and also between government users of space and organisations that contribute to creating capabilities in space. These include industry, academia, Innovate UK and the Research Councils.

The UK Space Agency works with UK Trade and Investment and the UK's global Science and Innovation Network to help the space industry sell UK capability abroad and attract inward investment. We do so by promoting the UK as a leading business-friendly location for starting and growing a space company and as a centre of innovation for products and services that exploit space systems.



We also aim to create a regulatory environment that supports the sector while meeting international obligations and ensuring that the UK is a trusted space-faring nation. Our work in assuring the safety, security and resilience of our space infrastructure is an important underpinning element to sector growth.

Our science programmes provide inspiration and discovery through their exploration of the universe and its study of planet Earth. For the next generation, the growth of the UK space sector will create opportunities for rewarding careers. To this end, the UK Space Agency is working with partners to build a skilled space workforce.



Partnership is central to our approach. We work with the public sector, industry, research organisations and the agencies of other countries in both bilateral and multi-lateral arrangements.

Government Departments and Non-Departmental Bodies

The UK Space Agency works with other departments:

- MoD, FCO and Cabinet Office on security and military space policy
- DECC on the use of space for climate change monitoring
- Defra on EO policy and applications (Defra has the policy lead on Copernicus and Group on Earth Observation)
- DCLG on Local Digital and applications across the local authorities
- DfE on space education issues
- UKTI on export support
- Science and Innovation Network for local representation around the world

Our 'Space for Smarter Government' programme continues to grow, increasing our work across government and strengthening existing links with Cabinet Office, Defra, DCLG, DFT, DECC and others.

Some funding for civil space activities remains within the Research Councils (for basic research, scientific exploitation of space missions and for post graduate training); Innovate UK (particularly for innovation and applications); and the Met Office (for operational weather satellite data). The UK Space Agency has formal relationships with these organisations.

European Space Agency

By working with international partners, the UK can participate in a range of space activities unaffordable by working alone. Over three-quarters of our investment is channelled through ESA to enable UK industry and academia to work in collaboration with Europe to develop world leading technologies, services and missions.

ESA is an inter-governmental organisation of 22 member states and one associate (Canada). The majority of its work is delivered via hundreds of competitive procurements from industry within a 'juste retour' system whereby the overall contract volume is broadly proportional to each state's financial contribution. ESA is managed by its governing Council of Member States. The UK Space Agency Chief Executive is the UK representative on this Council. Agency staff attend approximately 60 formal ESA meetings each year and many more informal meetings and technical workshops to advance and represent the UK's position.

The money invested in ESA programme's feature in the UK's Science and Innovation Strategy as an important way in which the Government invests in scientific infrastructure.

European Union

The European Union's involvement in space will continue to strengthen over the next year. The total funding allocated to EU space activities by its 28 member countries is approximately 11 billion for the period 2014-2021. This funding underpins a range of space programmes including the EU satellite navigation system Galileo, together with the regional European Geostationary Navigation Overlay Service (EGNOS) system. It also enables the development of the Earth observation programme, Copernicus as well as a new space surveillance and tracking (SST) initiative. Via the Horizon 2020 programme, the EU also provides funding for research and development into space technologies.

Harwell Campus

More recently, the Commission has proposed new European space regulation for the dissemination of Earth observation data from satellites for commercial purposes (COM/2014/0344).

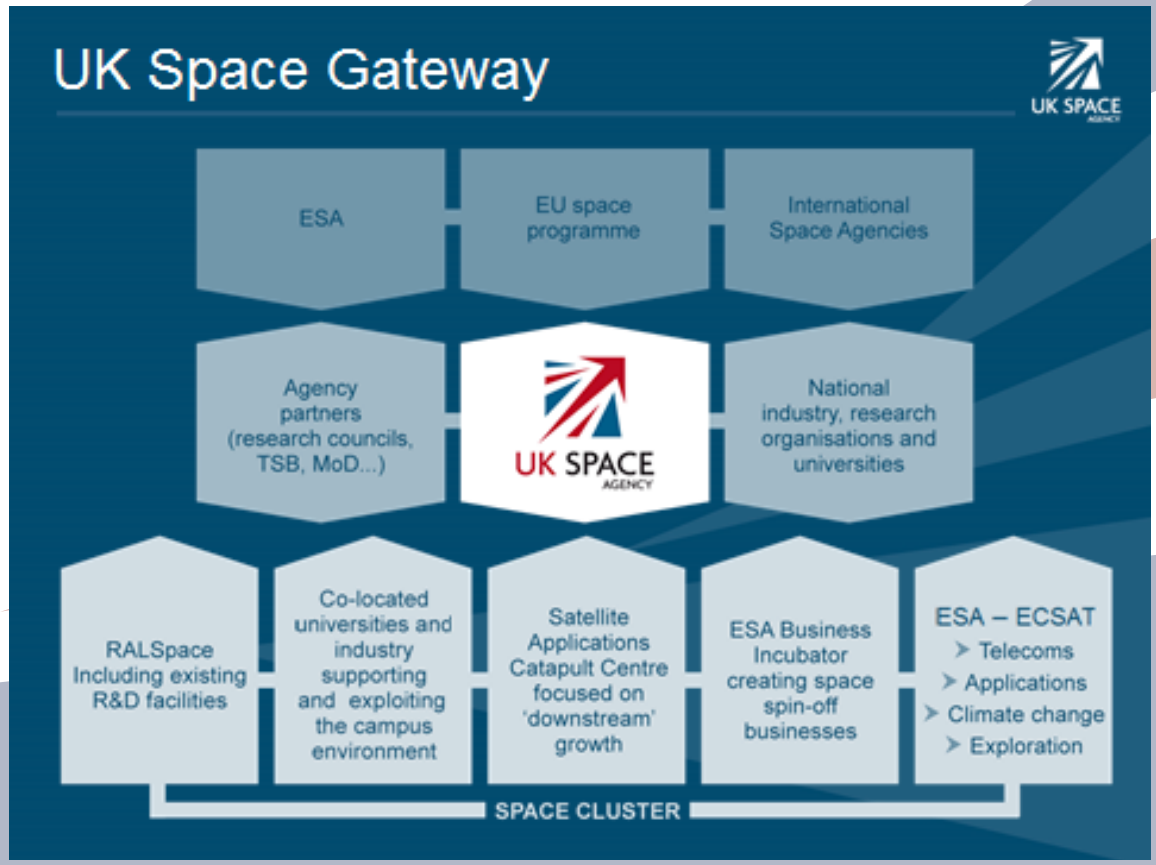
The UK Space Agency is active in ensuring that EU funding is used in line with UK objectives and ensuring that UK companies and institutions can compete fairly for opportunities. The Agency holds the Commission to account for the management of the EU space programmes and when discussing new European legislation, the Agency leads the negotiations on behalf of the UK.

The UK Space Gateway at Harwell and other national infrastructure

At the 2012 ESA Council of Ministers, the UK concluded a fresh agreement with ESA that is seeing the creation of a base at Harwell which has grown from less than 20 to 100 staff by the end of 2015. A purpose-built building (named in honour of the Briton who was the first ESA Director General, Roy Gibson) will open in summer 2015, to house the European Centre for Space Applications and Telecommunications (ECSAT). Further significant investments on campus include a ground terminal for the European Data Relay Satellite System (EDRS) in a prominent position at the entrance to the site, and significant new test infrastructure being established in a purpose-built building adjacent to the ECSAT site as part of the Rutherford Appleton Laboratory.

As a consequence of the UK's growth driven strategy for space, these decisions are attracting international attention. The Agency and its partners, including UK Trade and Investment (UKTI), are working to bring new space businesses to the UK, with a number of international companies in both up-stream and down-stream space applications establishing on campus.

To ensure that growth of the space sector is balanced and impacts across the UK, the UK Space Agency is leading work with Local Enterprise Partnerships and the Devolved Administrations to identify opportunities to engage new businesses with space technology, data, expertise and facilities. One aspect of this relates to requirements for further national ground infrastructure – for example, national test facilities for space propulsion and the ambitious plans to establish a UK spaceport. These assets are envisaged as forming the nucleus of further clusters of space business and academia in both the up and downstream sector.



Reporting Our Performance

We have 5 KPIs which we will report upon quarterly to the Executive Board and the UK Space Agency Steering Board. See 'Our KPIs'. The remaining PIs are grouped by Outcome. See Annex 1.

These PIs are representative of the work carried out in the Agency and will also be reported on quarterly to the Agency's Boards. Our Outcomes will continue to guide our activities over the medium term.

We will undertake an annual review of our KPIs and PIs to ensure consistency with available resources, priorities and government policy. These Performance Indicators allow our staff to see how their personal effort contributes to Agency Outcomes, and explains our progress to stakeholders, customers and to BIS.

The breadth of the Agency's work is so great that not every single activity the Agency is undertaking is listed here; instead we have a representative set of PIs and metrics.


Crab Nebula. Herschel Hubble

Our Outcomes

Outcome 1

We will have clear and established space policies and policy positions

The UK Space Agency sets the tone and scope of the Government's space policy and influences the direction for the wider space sector. It is important that the policies and strategies we put in place are informed by evidence and articulate the Government's priorities for space.

Within this Outcome we will meet the following objectives:

- Develop effective UK space policies to underpin actions and investments in space
- Work in partnership with our stakeholders to develop policies, seeking wider advice as appropriate
- Clearly articulate the Agency's role in delivering these policies
- Develop and maintain an effective and up-to-date evidence base to inform our advice and activities

Outcome 2

UK space policies and policy positions will be effectively represented at a national and international level

As the flagship organisation for space in the UK, the UK Space Agency works for the Government and the UK's space sector, both at home and abroad. Effective representation requires the Agency to be engaged with a number of international organisations, to have the backing of our national partners and to work with Whitehall to ensure that the UK maintains a strong position internationally.

Within this Outcome we will meet the following objectives:

- Influence the development of national, European and international emerging space policies and programmes
- Implement key objectives of the UK Space Agency Earth Observation strategy, published in 2013
- Fulfil our statutory and international obligations on behalf of the UK by providing an effective regulatory regime that meets international obligations whilst supporting the space sector and growth

Outcome 3

The UK will maintain and grow its national capability in space

UK Space Agency investment in national capabilities should help to link the UK space sector to priority international programmes and ensure the UK remains competitive in the future. Policy levers should be used to create the right regulatory environment for growth.

Within this Outcome we will meet the following objectives:

- Use space as an inspiring tool to attract young people towards STEM subjects
- To support public and private sector take-up of space-derived products and services
- To act as a catalyst to ensure UK space companies develop international links and secure a growing share of international programmes and markets
- Increase the national capability and infrastructure to enable UK organisations to research and compete in growing international markets
- Ensure that growth in the space sector harnesses the whole of the UK space economy and national capability
- Strengthen support to industry for exports and inward investments
- Pursue a coherent approach to the UK's space security interests to support growth

Outcome 4

UK investment in civil space will be effective, targeted and will deliver tangible economic or scientific benefit

The UK Space Agency is responsible for ensuring that the Government's strategic investments in space provide real benefit. To make sure that the UK is receiving the best possible value from its investment in space, the UK Space Agency must manage the ESA contribution, as well as being a proactive partner with the European Commission. Our national programmes complement this work.

Within this Outcome we will meet the following objectives:

- Ensure UK investments in ESA, the EU and our national programmes are targeted and well managed
- Ensure that UK scientists, industry users, and other stakeholders benefit from these investments
- Provide vision and leadership for the development of the UK Space Gateway based at Harwell, Oxford
- Deliver an excellent national programme in space science, Earth observation, exploration and technology
- Manage delivery of ESA Programmes decided at C-Min 2012 and 2014 to secure UK goals

Outcome 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

The ambition of the UK Space Agency is to become an established and recognised public institution in the UK, making valued contributions to society and the economy.

The Agency's communications and outreach activities will effectively represent the work the Agency and its partners are doing in the space sector, clearly relating the story of the UK in space. This story should be told to all audiences and stakeholders, through a variety of different channels and reinforced by partner organisations across the sector.

Within this Outcome we will meet the following objectives:

- Support key space-related events and conferences for decision makers, the public, industry and academia
- Raise the profile of UK industrial, academic and scientific excellence in space to national, European and international audiences
- Ensure that growth in the space sector harnesses the whole of the UK space economy and national capability

Outcome 6

The UK Space Agency will have the operational capability, capacity and culture to deliver the Civil Space Strategy

As a maturing organisation, the UK Space Agency is refining its ways of working and developing its staff to face the challenges of a complex business environment. The UK Space Agency has to be intelligent and measured about its future, and be agile to respond to evolving priorities.

Within this Outcome we will meet the following objectives:

- Have motivated and empowered staff with the skills to deliver current and future needs of the Agency and the space sector
- Have effective governance, planning, operational, robust risk management, internal control, security and financial systems to support the Agency's work
- Drive continuous improvement through our business and engage with wider efficiency reforms within BIS

Our KPIs

We have 5 KPIs which are the UK Space Agency's priority goals for the coming year. They are the key issues that the Agency must concentrate on above all others over the next year. These KPIs are underpinned by a specific Metric and are shown below.

Exploit the education and inspiration value of the six month 'Principia' mission to the International Space Station

Metric

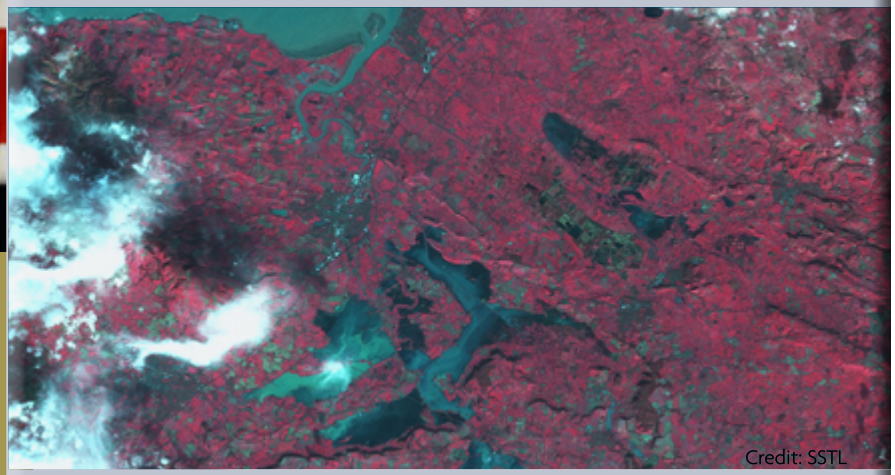
Engage 400,000 young people in educational activities related to Tim Peake's mission by Q4

Tim Peake is working with the UK Space Agency to help us build a strong programme of science in the UK. His mission will help expand our international competitiveness in areas such as health and ageing research, innovative materials and plasma physics. Tim is also an inspirational role model for young people in the UK.

Implement the UK strategy for Earth Observation from space

Metric

Agree an action plan to address the UK priority actions for Earth Observation by the end of Q2

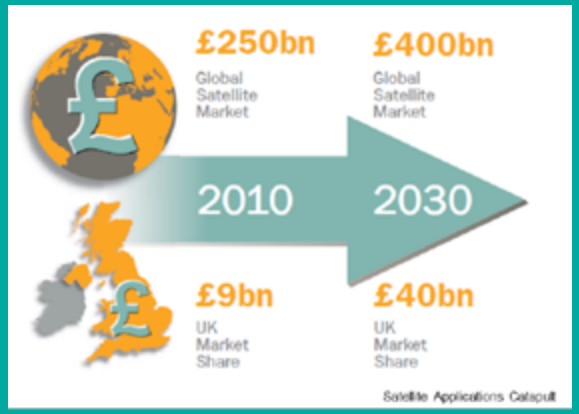


Working with partners in academia, government and industry, we will strengthen our world-leading position in EO science and technology. The UK will provide leadership in major international space programmes, developing and exploiting EO missions to address critical gaps in our understanding of the Earth system.

Achieve the best value for money outcome for the UK Space Sector from the next Spending Review

Metric

Business cases (including UK priorities for ESA C-Min 16) produced to support the Agency's proposed investment programme by the end of Q2



This KPI is about engaging constructively with BIS and the wider community to ensure that the case for space is heard demonstrating efficient and effective use of public funding.

Efficient delivery at the local, national, European and global level by collaborating with others

Metric

This KPI is underpinned by the projects sponsored by the UK Space Agency

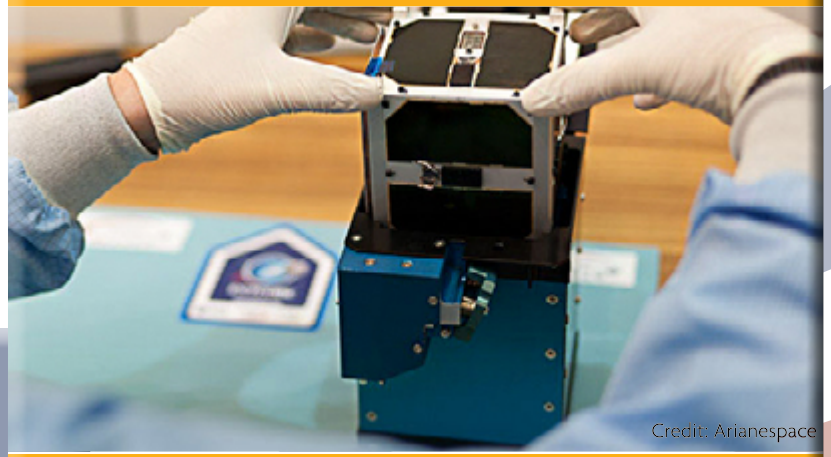

Credit: SSTL

The Agency supports a broad range of space projects each of which has been accorded a PI reflecting its key milestone due in the coming year. These PIs, once aggregated, form the basis of the Agency's Key Performance Indicator for its project activities.

Improve evidence on the value added of the UK Space Agency to the UK economy

Metric

Report on the impacts of the UK Space Agency's activities on the UK economy, reflecting the views of industry, stakeholders and other Government Departments by the end of Q3


Credit: Arianespace

Having a strong and up-to-date evidence base with a clear understanding of the value for money of the Agency is essential for enabling evidence-based decision making. By strengthening our evidence base we will be able to improve the design of our programmes and policies, allowing them to be better targeted, less risky and more effective.

Managing Our Resources and Increasing Efficiency

The UK Space Agency has an administration allocation which is part of the overall BIS administration budget. This budget includes all the costs of providing policy, funding and regulation functions. It also covers all the back-office costs associated with administering the UK Space Agency, such as HR, IT, finance, communications, and legal. At present, the UK Space Agency does not own any assets (e.g. property, plant) and pays rent on its accommodation. The UK Space Agency's activities in support of research and innovation programmes – both national and international – are funded through the Agency's programme (resource) and capital allocations.

The Agency's ratio of administration budget to programme and capital costs is approximately 1%, demonstrating a high level of efficiency. However the Agency continues to seek efficiency measures wherever possible.

The Agency will continue to build upon the financial input and output efficiencies realised in 2014/15 in its approach towards financial management in 2015/16. The Agency's administrative budget will reduce by 3% this coming year despite the additional costs that will be incurred as a result of expanding our staffing levels. A plan to realise efficiencies to match this target has been produced.

Similarly, the Agency will continue to bear down on costs within its programme budget, whether within the National Programme or funds spent through ESA, to ensure continued value for money and efficient allocation of resources.

Allocation by Departmental Expenditure Limit (DEL) & Annually Managed Expenditure (AME)[1]	2014/15 Est Outturn £m	2015/16 Plan £m
DEL Resource Allocation - Programme	199.1	210.2
DEL Resource Allocation - Administration	3.4	3.5
DEL Capital Allocation	113.0	156.0
AME	0.8	0.8
Total	**316.3**	**370.5**

Allocation by Expenditure Category	2014/15 Est Outturn £m	2015/16 Plan £m
International Subscriptions	268.6	285.3
National Programme	43.6	80.8
Operating & Other Costs	4.1	4.3
Total	**316.3**	**370.5**

1 - These are the formal allocations at the time of publishing the Corporate Plan. Due to the timing, it is therefore possible for a level of movement as the 14/15 outturn is refined or there are any changes to future budgets.

Our Relationship with BIS

In December 2014 the Minister of State for Universities, Science and Cities, Greg Clark, published 'Our plan for growth: Science and Innovation', a long term strategy to make the UK the best place in the world for science and business. This plan contains six elements:

1. Deciding priorities
2. Nurturing scientific talent
3. Investing in our scientific infrastructure
4. Supporting research
5. Catalysing innovation
6. Participating in global science and innovation

These support the 5 key principles of the Strategy for all scientific research and development in the future:

- Excellence
- Agility
- Collaboration
- Place
- Openness

The UK Space Agency contributes directly to these themes through our sector-focused work on policy, skills, research, innovation and growth. The Agency does this by providing a unified mechanism which supports industrial growth in space activities. For example the Agency:

- Provides a cross Government mechanism to make decisions on space projects which reflect the collective priorities for the UK;
- Works with industry and academia, providing direct investment through national and ESA programmes, to maximise the role of space technologies in increasing economic growth in high tech services;
- Strengthens the UK position in EU, ESA and international discussions and decisions by drawing together UK space policy into a coherent vision with clear strategic direction;
- Increases UK exports to high-growth and emerging markets and ensures the UK remains a top destination for high-quality, foreign direct investment projects;
- Creates a positive environment for business resulting from the improved design and delivery of regulation;
- Strengthens outreach and education activities by raising the profile of the UK space programme within the public domain, thus encouraging greater uptake of STEM subjects.

Science and Innovation are at the heart of the UK's long term economic plan. The UK's ability to capitalise on its cutting edge research base, and turn this knowledge into the innovative product and services we need and want, will be critical to our future prosperity and societal wellbeing.

Annex 1 - 2015 / 2016 Performance Indicators

The Key Performance Indicators are shown in bold

Outcome 1 : We will have clear and established space policies and policy positions.

No.	PI	Metric
1.1	A corporate plan that translates the UK Civil Space Strategy 2012-16 into action	Corporate Plan 15/16 issued by end of Q1
1.2	**Improve evidence on the value added of the UK Space Agency to the UK economy (KPI)**	**Report on the impacts of the UK Space Agency's activities on the UK economy, reflecting the views of industry stakeholders and other government departments by the end of Q3**
1.3	Strengthen the Agency's approach to evidence gathering to support strategy, policy development and investment decisions	Evaluation Strategy and Investment Strategy developed and agreed by end of Q2
1.4	Maintain and improve economic and social impact analysis of the UK space sector to track progress towards the £40 bn target by 2030	Complete analysis of the Size and Health survey and other evidence sources to ensure a robust approach to the 2016 study by end of Q3
1.5	**Achieve the best value for money outcome for the UK Space Sector from the next Spending Review (KPI)**	**Business cases (including UK priorities for ESA C-Min 16) produced to support the Agency's proposed investment programme by the end of Q2**
1.6	A National Space Policy setting out the responsibilities of all actors	National Space Policy published by end of Q1

Outcome 2 : UK space policies and policy positions will be effectively represented at national and international level.

No.	PI	Metric
2.1	Develop agreed UK position on Galileo evolution	Policy position agreed across government by Q3
2.2	**Implement the UK strategy for Earth observation from space (KPI)**	**Agree an action plan to address the UK priority actions for Earth Observation by the end of Q2**
2.3	Deliver an effective regulatory capability as an enabler for sustainable space sector growth	Ensure we process 90% of licence applications within published deadlines
2.4	Review the economic cost of delivering the space licensing regime and the fees charged to ensure value for money for the tax-payer and a clear and transparent fee system for applicants	Publish outcome / findings of fees review and issue consultation on possible fees reform by Q4
2.5	Implement the initial concept of operations for the Public Regulated Service (PRS) component of Galileo	Develop and implement the UK Proposal for regulation of the PRS by end of Q4
2.6	Manage Outer Space Act 1986 reform process to conclusion and extend reforms to relevant Overseas Territories and Crown Dependencies	Outer Space Act reform to be brought into force in the UK with work underway to extend the change to the relevant Overseas Territories and Crown Dependencies by Q3
2.7	Ensure the UK has a clear position on standards for the space sector	Develop a map of current UK standards activity and provide a gap analysis by Q4
2.8	Position the UK at the leading edge for exploitation of climate services from space	Demonstrate capability by Q4

Outcome 3 : The UK will maintain and grow its national capability in space.

No.	PI	Metric
3.1	Develop Spectrum (radio frequency) policy positions with stakeholders to ensure sufficient spectrum is available for space sector growth in order that space sector interests are reflected in the development of UK domestic and international spectrum policy	Develop and consolidate UK space sector positions for the World Radio Conference '15 community by the end of Q3
3.2	Strengthen support to industry for exports	Identify and promote exports into 4 hotspot regions by end of Q4
3.3	Ensure existing and new MoU's reflect the Agency's International Partnership priorities	Review existing MoU's and identify new requirements by end of Q3
3.4	Co-ordinate on-going delivery of NSSP objectives across Government and implement the outcomes attributable to the UK Space Agency	Establish NSSP priorities agreed across HMG and agree implementation plan in context of CSR and SDSR by end of Q4
3.5	Support and coordinate the international effort around Space Situational Awareness	Secure an influential role within the emerging EU Space Surveillance and Tracking programme to further the UK's interests by end of Q2
3.6	Improve the national understanding of Space Security risks and dependencies	Identify criticality scales and deliver sector resilience plan by the end of Q4
3.7	Work with the space sector to update the Space IGS Growth Action Plan to reflect changes and new priorities	Publish an update by July 2015
3.8	Deliver an effective education, skills and outreach programme for 2015/16	Engage over 120,000 people (in addition to 3.9) in space education, skills and outreach activities, by Quarter 4
3.9	**Exploit the education and inspiration value of the 'Principia' astronaut mission to the International Space Station (KPI)**	**Engage 400,000 (in addition to 3.8) young people in educational activities related to Tim Peake's mission by the end of Q4**
3.10	Ensure STEM graduates possess appropriate skills and attributes required by the UK space sector	Agree scope of careers and skills portal with partners and representatives of UK Space Sector by end of Q1
3.11	Run a National Spaceflight Programme to deliver commercial spaceflight capability in the UK by 2018 as an effective cross-government programme	Open a Spaceflight Office by end of Q3
3.12	Develop and publish an industrial plan for the UK Space Sector to sit alongside the IGS that identifies key capabilities and the need for investment for the future	Develop an industrial plan in collaboration with industry by end of Q3
3.13	Deliver a programme of local growth activities in partnership with the devolved administrations and local enterprise partnerships	Collaborate with 3 further LEPs/ Devolved Administrations to identify and implement specific opportunities to use space as a focal point for delivering their economic plans by the end of Q4, focusing on business incubation, skills needs, inward investment and alignment of local and national business support
3.14	Engage with the industrial sector to facilitate the growth of existing and new SMEs in the UK	Work with industry to produce a stocktake of UK Space Agency activities to assess their usefulness to SMEs by end of Q4
3.15	Develop a national plan to coordinate investment in ground segment, infrastructure and technology centres of excellence	Establish a directory of UK facilities and an assessment of key gaps in facilities / capabilities by end of Q2

Outcome 4 : UK investment in space will be effective, targeted and delivers tangible economic, societal or social benefit.

No.	PI	Metric
4.1	Maintain progress against cost and schedule for UK deliverables to Gaia	Finalise allocation of financial support for operations from April 2015 to March 2016 by end of Quarter 1 and confirm funding requirements for the period April 2016 – March 2018
4.2	Maintain progress against cost and schedule for the UK deliverables to PLATO	UK contributions approved for next phase at ESA Instrument System Requirements Review in January 2016
4.3	Maintain progress against cost and schedule for the UK deliverables to Solar Orbiter	Deliver UK led instruments (Magnetometer and SWA) to ESA by end of Q4
4.4	Maintain progress against cost and schedule for the UK deliverables to Euclid	Successful completion of ESA's Instrument Critical Design Review for the UK-led VIS instrument by the end of Q3
4.5	Maintain progress against cost and schedule for the UK deliverables to JUICE	Achieve readiness for UK-led Magnetometer Instrument Preliminary Design Review kick-off in Q4, agreeing scope and cost
4.6	Maintain progress against cost and schedule for the UK deliverables to BepiColombo	Define operational support in preparation for Jan 2017 launch by end Q3
4.7	Maintain progress against cost and schedule for the UK deliverables to JWST MIRI	Integrated Science Module cryo-vacuum testing completed by end of Q2
4.8	Maintain progress against cost and schedule for the UK deliverables to the AlSat-Nano project	Platform delivery to Algeria by end of Q4
4.9	Maintain progress against cost and schedule for the UK deliverables to ExoMars	Structural Model of Pancam delivered by end of Q3 2015
4.10	Maintain progress against cost and schedule for the UK deliverables to Insight	Deliver flight spare of short period seismometer by the end of Q1 2015
4.11	Increase the number of UK scientists participating in the ELIPS programme, at least commensurate with the UK's share of the programme subscription	Ensure that the volume of applicants for new ESA calls for science proposals are at least in proportion to UK investment (currently 7.5%)
4.12	Maintain progress against cost and schedule for the second phase of the National Space Technology Programme (NSTP-2)	Select new NSTP-2 Technology projects under CEOI-ST by end of Q2 for Flagship, Fast Track and Pathfinder projects
4.13	Maintain progress against cost and schedule for the deliverables to NSTP-2 Propulsion projects	Establish new project reporting schedule with Innovate UK for successful projects on the joint Innovate/UKSA propulsion call by end of Q2
4.14	Deliver an excellent national EO instrumentation programme and maintain progress against cost and schedule	To ensure that all projects arising from CEOI Calls 7 and 8 come to a successful conclusion by end of Q1 2016
4.15	Maintain progress against cost and schedule for the deliverables to NovaSAR	Completion of satellite build, full systems integration and ground testing, by end of Q3
4.16	Maintain progress against cost and schedule for the deliverables to SABRE	Successful completion of heat exchanger Baseline Design Review by end of Q3

4.17	Successfully deliver the International Partnership Space Programme (IPSP) to time and cost	Maintain progress against cost and schedule for the programme deliverables to a 90% completion figure
4.18	Maintain progress against cost and schedule for the deliverables for the PRS technology programmes	Complete delivery of national and international stakeholder demonstrations by end of Q3
4.19	Establish future plan for national support for long-term mission operations	Carry out a review of long term operations support for 5 missions in consultation with STFC and ESA to establish future requirements. Completion by end of Q3
4.20	To ensure that key UK roles on the ESA Biomass mission are maintained in both the science and industrial aspects	Ensure that industry secures a leading role on this mission, with emphasis on the instrument
4.21	Support expansion of ESA presence at the Harwell Oxford Space Cluster towards the goal of a dedicated facility (ECSAT) with 100 ESA staff, by end of 2015	Secondary legislation for Hosting Agreement concluded by end of Q3
4.22	Provide vision and leadership for the development of the UK Space Gateway based at Harwell, ensuring that stakeholders are engaged and co-ordinated in developing the space community on campus	At least 500 staff employed by labs, facilities, agencies and businesses located at the UK Space Gateway by end of Q4
4.23	Maximise the value of the UK Space Gateway as a focal point to support growth across the UK	By Q3, develop and widely disseminate information resources that explain the capabilities and expertise available at Harwell and elsewhere in centres of expertise which can be used to support businesses across the UK. By Q4, conduct a survey of relevant stakeholders to inform future direction of the Gateway.
4.24	Ensure that the UK achieves its priorities for the European Centre for Space Applications and Telecommunications.	Plan which reflects UK priorities for period from 2016 onwards defined in partnership with ESA by end Q4
4.25	Generate growth in UK economy by the provision of Sentinel data to the academic and industrial community	Produce an interim assessment of the economic impact of take up of Sentinel / Copernicus data on applications development by the end of Q4
4.26	Maximise the economic impact of the Agency investment in the ESA ARTES commercial satcom programme decided at ESA C-Min 12 and C-Min 14	Produce an economic assessment of the programme and build a mechanism for ongoing monitoring by end of Q2

Outcome 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.

No.	PI	Metric
5.1	Ensure public perception of space recognises everyday benefits of space programmes	Develop new communications strategy, agreed with stakeholders, by end of Q2
5.2	Deliver effective communications including maximising use of low-cost digital media	Engage over 1 Million people through the Agency website, Twitter, LinkedIn, Facebook, Flickr and YouTube, by end of Q4
5.3	Maximise the unique opportunity of the Principia Mission to increase awareness of UK space activities, its relevance to everyday life and its power to inspire	Tim Peake launch event to be successfully communicated to an audience of 20 million by the end of Q3
5.4	Promote continuous growth in space applications work in the UK	Applications action plan approved by the end of Q1 and priority implementation plan underway by the end of Q4
5.5	Use the SSGP to help the public sector to save money, innovate and make more effective policy decisions by using satellite enabled services for smarter, more efficient operations and to stimulate growth	Support at least 3 services to become ready for operation by public sector users by the end of Q4

Outcome 6 : The UK Space Agency will have the capability, capacity and culture to deliver the Civil Space Strategy.

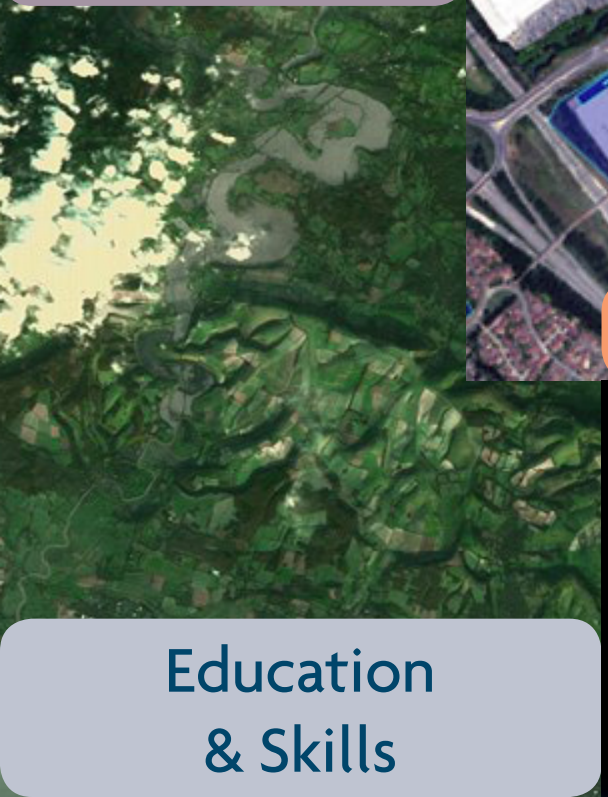
No.	PI	Metric
6.1	Develop the approach to the next Civil Space Strategy	Hold a consultation meeting to prepare for the Civil Space Strategy developed by the end of Q4
6.2	All members of staff receive at least the BIS standard L&D training requirements	Every member of staff has received a total of 5 days a year training, focussed on individual and business needs
6.3	Agency programme, capital and administration budgets for 2015/16 are sufficient to deliver corporate plan objectives	Agency agreed out-turn is within budget (tolerance of +0 and -1%)
6.4	Timely completion of Annual Report and Accounts and laying before Parliament in line with HMT/ BIS best practice guidance	2014/15 Annual Report and Accounts laid by 30 June 2015 and by no later than the parliamentary summer recess
6.5	Deliver in year efficiency improvements within the admin budget to reflect flat cash, less 3.5%	Deliver in year efficiencies of £130,000
6.6	Produce an Agency Efficiency Strategy which ensures the efficient and effective use of Agency resources	Produce an Agency Efficiency Strategy by end of Q2
6.7	Review all of the current business agreements with other parties	Validate the requirement, governance and resources required to support each agreement by the end of Q4

Glossary

ARTES	Advanced Research on Telecommunications Satellite Systems
BBSRC	Biotechnology and Biological Sciences Research Council
BGS	British Geological Survey
CAA	Civil Aviation Authority
CEMS	Climate and Environment Monitoring from Space
CEOI	Centre for Earth Observation Instrumentation Programme
CEOS	Committee on Earth Observation Satellites
CNES	Centre National d'Études Spatiales, France (English: National Centre for Space Studies)
CREST	Collaborative Research in Exploration Systems and Technology
DECC	Department of Energy & Climate Change
Defra	Department for the Environment Food and Rural Affairs
DEL	Department Expenditure Limit
ECSAT	European Centre for Space Applications and Telecommunications
EDRS	European Data Relay Satellite
ELIPS	European Programme for Life and Physical Sciences
EO	Earth Observation
EOEP	Earth Observation Envelope Programme
EPSRC	Engineering & Physical Sciences Research Council
EPS-SG	EUMETSAT Polar System - Second Generation
ESA	European Space Agency
EUMETSAT	European Organisation for the Exploitation of Meteorological Satellites
GNI	Gross National Income
GNSS	Global Navigation Satellite System
HMG	Her Majesty's Government
HMT	Her Majesty's Treasury
IAP	Integrated Applications Promotion
IPSP	International Partnership Space Programme
IGS	Innovation & Growth Strategy
ISS	International Space Station
JUICE	Jupiter Icy Moons Explorer
JWST MIRI	James Webb Space Telescope Mid-Infrared Instrument
LEP	Local Enterprise Partnership
MoU	Memorandum of Understanding
MRC	Medical Research Council
MREP	Mars Robotic Exploration Preparatory Programme
NCEO	National Centre for Earth Observation
NERC	Natural Environment Research Council
NGP	Next Generation Programme
NSSP	National Space Security Programme
NSTP	National Space Technology Programme
PLATO	PLAnetary Transits and Oscillations of stars
PRS	Public Regulated Services
SABRE	Synergetic Air Breathing Rocket Engine
SDSR	Strategic Defence and Security Review
SME	Small and medium sized enterprises
SSA	Space Situational Awareness
SSGP	Space for Smarter Government Programme
SST	Space Surveillance and Tracking
STEM	Science, Technology, Engineering, Maths
STFC	Science & Technology Facilities Council
STSE	Support to Science Element
TTP	Technology Transfer Programme
UKTI	UK Trade and Investment

Satellites used for precision agriculture

Applications & Services



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

Security of space from space

Policy & Regulation

Satellites used for town planning. Credit: Satellite Applications Catapult

Business Growth

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

Technology & Innovation

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

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

Science

UKSA/15/1

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