

UK Space Agency Corporate Plan 2014-15



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Foreword

Space is one of the Government's 'Eight Great Technologies' which will make a critical contribution to the UK's Industrial Strategy. Space technology and applications support delivery of wider industrial strategy goals in autonomous robotics, energy, agri-science and aerospace among others. Space is becoming a critical tool for the public sector in flood management, monitoring land use change and supporting the emergency services. Space technology is essential for understanding our changing planet and for exploring our solar system, our galaxy, and the Universe beyond. The excitement of space attracts people into careers in science and technology. Thus, space

has an important place in the central goal of the Department for Business, Innovation and Skills to make the UK a competitive place for business in the 21st Century.

Set up as one of the recommendations of the 2010 Space Innovation and Growth Strategy (IGS), the UK Space Agency has made tremendous progress over the past year. The Agency delivered the majority of the objectives that were set for us in our 2013/14 Corporate Plan together with additional actions that were not known at the outset. This second edition of the Corporate Plan continues to translate the broad goals of the UK Civil Space Strategy into more specific actions which will drive progress along our six pathways to growth. The Plan also includes corporate actions to build a sustainable and cost-effective Agency.

The primary audience of our Corporate Plan is our partners and stakeholders in the space sector at home and abroad. It should be read in conjunction with the UK Civil Space Strategy 2012-16 available on the Agency's web site.

As foreseen in last year's Plan, the structure of the document remains the same, while the specific actions are updated to set out our objectives for 2014-15. This allows the delivery of the Civil Space Strategy to be measured. The document also explains how our people and resources are applied to our various goals.

Taking stock of last year, we made great progress in both programmes and policies. We started disruptive and innovative technology initiatives in the form of the NovaSAR remote sensing satellite. We delivered instrument technology for the LISA Pathfinder mission and supported a range of new technologies in Earth observation and satellite navigation. The Government supported the development of the sector's Space Growth Action Plan and the Select Committee study into the work of the UK and European Space Agencies.

A major review of the Agency's own organisation has aligned it better with the ambitious growth objectives set by the UK space sector. The strengthened organisation is 50% larger and new staff are in place to enhance the Agency's capacity to support the dramatic increases in export and inward investment, the downstream market and the exploitation of space science missions needed to help deliver a UK space sector worth £40bn a year by 2030. It is a challenging target and we are committed to working with all of the stakeholders to make this happen.

Several international agreements were signed to support UK exports and to strengthen international ties that will benefit UK research and industry, for instance with the French space agency, CNES. The date of the flight of astronaut Tim Peake to the International Space Station - December 2015 - was announced last year and a comprehensive package of education and outreach activities will delivered next year. The Agency's activities in education and outreach will ensure the skilled professionals that the sector needs to continue to grow. More than 80,000 people follow our twitter feed to keep up to date with developments in the UK space sector.

Looking ahead, the National Space Policy, the National Space Security Policy and the Government's response to the Space Growth Action Plan will all be issued in 2014/15. Implementation of these policies and recommendations will be a core activity during the coming year as you will see in the Plan. The UK Civil Space Strategy will be revisited in 2016 and we will begin work with the



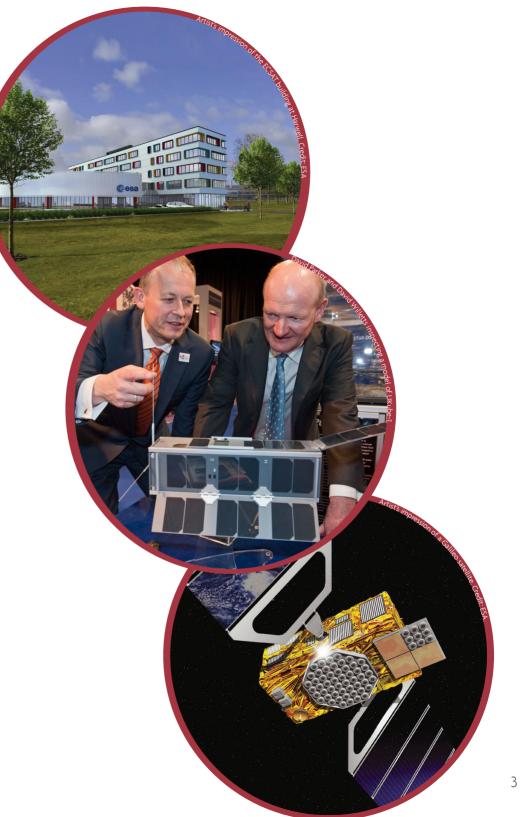
sector during 2015 to shape and agree the follow-on strategy to continue our focus on the growth of the sector.

Reform of the UK space licensing regime will cap the current unlimited liability on satellite operators at £60M. The Agency will implement the actions of the BIS Strategic Review as part of its commitment to improving efficiency and effectiveness. Decisions on investments at the December 2014 ESA Council of Ministers will be prepared during the year.

The degree of Government support to the UK space sector is visible abroad. The message that the UK is *the* place to develop the next generation of space technology and applications is being heard. Several international companies have established a presence in the UK in the past year including Deimos, Thales Alenia Space and Aerojet Rocketdyne (European Space Propulsion).

The Agency's progress is fundamentally dependent on the knowledge and commitment of our outstanding staff. When you read this document, I hope you will gain a strong sense of the breadth of our Agency's work. We would like to hear from you as working with stakeholders and industry is central to our approach. Please feel able to let me know how we are doing.

David Parker Chief Executive, UK Space Agency April 2014



Introduction

The UK Space Agency is an executive agency of the Department for Business, Innovation and Skills (BIS) and at the heart of UK efforts to explore and benefit from space. 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 the Technology Strategy Board.

This Corporate Plan is focused on delivering our contribution towards the UK National Space Policy and particularly the six pathways to growth identified in the UK Space Agency Civil Space Strategy 2012-2016. Our mission is to lead and grow the UK space sector, building a space programme with maximum economic, scientific, and policy benefit for the UK. This Corporate Plan sets out what we will deliver in 2014/15 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 help make the UK space sector a success, we have identified six intended outcomes of the Agency's work:

- 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 2012-2016.

This document sets out the main actions we will take to progress these outcomes in 2013/14 for the understanding of our sponsors, staff, and stakeholders. Its content reflects the engagement we've had with our staff and key stakeholders.

Strategic Overview

With a sector worth £9.1 billion to the economy, growing at a rate of more than seven per cent per annum, the UK Space Agency was established to lead and foster the growing UK space sector, delivering a world-class space-programme with maximum economic, scientific and social benefit. We drive the British contribution to collaborative European efforts on space, represent the UK sector on the international stage and work to inspire the next generation of space scientists and technologists. We are also responsible for the licensing regime under the Outer Space Act (1986) to secure compliance with international obligations on launching and operation of space objects. Taken together, we aim to create a dynamic environment in which the UK space sector can meet its ambition to grow by a factor of four between 2010 and 2030.

The global space economy is changing rapidly, with strong government investments continuing alongside a vibrant commercial marketplace. A new generation of small satellites are delivering cost-effective Earth observation data and services; while the market for broadcast and communications satellites is driving innovation and cost reduction. The downstream sector of the space industry offers significant untapped potential which needs to be unlocked. New funding models are allowing services to be developed with much reduced public funding, while stronger public investment is being targeted to those areas where longer term growth is anticipated. The creation of the European satellite navigation capability (Galileo) and a long term Earth observation system (Copernicus) present new opportunities for creating novel applications built on the hugely increased amount of space data that will become available. The UK response must be agile and creative.

The work of the UK Space Agency is therefore aligned to deliver the UK Civil Space Strategy 2012-2016 (available on the UK Space Agency website). The

primary goal of the strategy is to foster the growth of the space sector and maximize the benefit of space activities for science, commerce, government and society. The central goal is to create a £40 billion sector in the UK by 2030 via six growth pathways:

- Growth Through New Opportunities
- Growth From Export
- Innovation Supporting Growth
- Science To Underpin Growth
- Education For Growth
- Growth Through Smarter Government

Our Approach

Our actions are intended to drive progress along these six pathways towards the end goal. Investment is targeted at areas that have the greatest potential for delivering economic return, scientific excellence and societal benefit. We provide coherence between investment in long-term basic research and nearterm applications in order to harness the skills of universities, national facilities and industry to create a strong national capability.

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, the Technology Strategy Board 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 overseas investment. We also aim to create a regulatory environment that promotes the sector while meeting international obligations and ensuring that the UK is a trusted space-faring nation.

Our space programme provides inspiration and discovery through its 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.

Future Challenges

In a challenging fiscal environment, the most critical challenge facing the UK Space Agency over the next three years is to capitalise on the commitment of Government to support the UK space sector in meeting its ambitious growth targets. In 2014/15, this work is focused around four main themes reflecting our new corporate structure:

Policy

This involves strengthening the Agency's policy leadership role in the UK by completing and publishing a National Space Policy to link the Civil Space Strategy and the National Space Security Strategy. We must also prepare for the ESA Council of Ministers 2014; reach a conclusion on the evolution of the ESA/EU relationship; and make the first steps towards a regional space policy.

Growth

Following the publication of the Space Growth Action Plan and the Government response, many actions are now incorporated into this year's Corporate Plan, including effort to support the local growth plans and skills point of contact. The EU's budgetary commitments in space have doubled since the last multi annual budget of the European Commission. This highlights amongst other issues the need for Government to articulate its requirements for space products and services. In response we have set up the Space for Smarter Government Programme to allow neutral brokerage of ideas between public sector and potential service suppliers.

Programmes

The Agency directly or indirectly manages a growing portfolio of projects. Priorities in 2014/15 will include maintaining progress of NovaSAR, completing the MIXS instrument for BepiColombo; and securing a robust programme for Phase 3 of SABRE. Fresh project calls are planned for both National Space Technology Programme (NSTP) Phase 2 and CEOI.

Corporate Performance

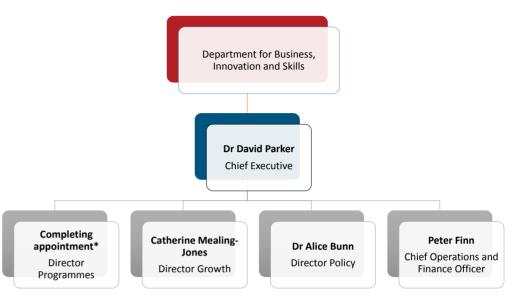
Following a far-reaching change programme in 2013/14, a revised organisation will come into operation in 2014/15. This will strengthen policy and programme delivery and increase our emphasis on coordinating actions to support growth. Our new Operations and Resources team will re-double efforts to increase efficiency, identify and manage risks, and increase the skills of staff and develop their individual talents.

Who we are

Dr. David Parker was appointed Chief Executive of the UK Space Agency in January 2013. The Chief Executive Officer is advised by five members of the Steering Board; currently Rob Douglas (Chair), Sally Cantello, Baljit Dhillon, Prof. David Southwood and Jeremy Clayton, the representative for the Department of Business Innovation and Skills. The UK Space Agency receives programme advice from the community via a set of advisory bodies that include representatives of industry, academia and cross-representatives from other public bodies such as the research councils, Technology Strategy Board and other government departments including Defra, MoD, DECC and DfE. High level space policy advice is provided to the Minister by the Space Leadership Council.

The UK Space Agency currently employs sixty five full-time equivalent (FTE) staff including secondees from other organisations and industry with a range of specialist skills and knowledge in all aspects of the space sector. They are based primarily at the head office in Swindon, with two smaller units in Harwell (near Oxford) and London (at BIS). The UK Space Agency is now organised into four directorates: Policy; Growth; Programmes; and Operations and Resources (Figure 1). Figure 2 illustrates governance arrangements which are outlined further in Annex 1.

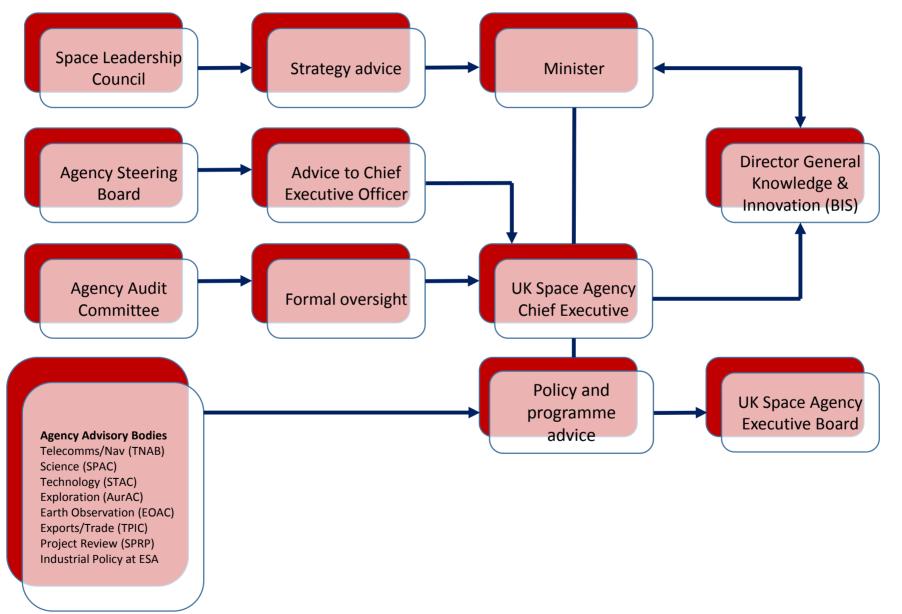
Figure 1: High level structure of the Agency



*Role currently subject to civil service recruitment process

Figure 2: 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 from the Agency Steering Board and governance from the Agency Audit Committee. The Executive Board are advised through a suite of thematic bodies.



How We Work

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

The UK Space Agency works with other departments on security and military space policy (MOD and Cabinet Office); use of space for climate change monitoring (DECC) and land use applications (Defra, who has the policy lead on Copernicus); and space education issues with Department for Education (DfE). FCO is involved for foreign policy aspects; UKTI (inward investment and export support) and the Science and Innovation Network for local representation around the world.

In 2014/15 our 'Space for Smarter Government' programme will become operational, increasing our work across government and strengthening existing links with Defra, DCMS, MoD, DfE, DECC, DFID and others. We are also planning an exciting new programme to apply space technology and applications to assist with overseas development as a result of a funding commitment announced in the Autumn Statement 2013.

European Space Agency

By working with international partners, the UK can participate in a range of space activities unaffordable by working alone. Around eighty per cent of investment by the UK Space Agency is channelled through the European Space Agency (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 twenty member states and one associate (Canada). Ninety per cent 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 the Council. Agency staff attend approximately sixty formal ESA meetings each year and many more informal meetings and technical workshops to advance the UK's position.

European Union (EU)

Following the Lisbon Treaty, the EU is taking an increasing role in space policy. The EU's programmes are funded directly by Member States through the seven-year Multiannual Financial Framework (MFF). The total funding allocated to EU space activities by the Member States in the MFF 2014-2021 is approximately €11 billion. The UK Space Agency negotiates the key legal documents through which these programmes are managed (the 'regulations') and also many lower level agreements. We also promote the opportunities these programmes provide to the UK sector and - where needed - make corresponding national investments to maximise the exploitation of the space infrastructure being created (Galileo and Copernicus). Agency staff attend the boards and committees of the EU space programme to advance the UK perspective. The UK is particularly influential in governance and security aspects of Galileo. The EU is also planning to assign increased resources to space R&D via the Horizon 2020 programme and the UK Space Agency has identified the UK's priorities and is promoting the opportunities arising.

The UK Space Gateway at Harwell and other national infrastructure

In 2008, the UK took a strategic decision to establish a focus for new national space infrastructure at the Science and Innovation Campus at Harwell, near Oxford. The UK Space Agency is responsible within the UK Space Gateway project for coordinating the various initiatives underway to ensure coherence of the public and private sector partners. The Gateway will work with partners across the UK, Europe and around the world and will be a key delivery vector for the UK Civil Space Strategy.

As a first step, and alongside the existing Space Science and Technology Department of STFC (known as RAL Space), an office of the European Space Agency was established in 2009 focused on integrated applications, exploration and climate change science. Responding to a recommendation of the 2010 Space Innovation and Growth Strategy, a nationally-funded facility (ISIC) was established in 2010, focused on downstream applications and technology. Facilities created included data visualisation tools; a cloud computing system for climate and environment monitoring data; and facilities for exploiting national space missions. In 2013, this has evolved into a larger Satellite Applications Catapult Centre, supported by the Technology Strategy Board. ESA, STFC and more recently, the Satellite Applications Catapult have co-funded a space business incubator which has created two dozen new businesses on-site.

At the 2012 ESA Council of Ministers, the UK concluded a fresh agreement with ESA that will see the Harwell office grow rapidly from less than 20 to 100 staff by the end of 2015. Personnel will be housed in a new building named in honour of the Briton who was the first ESA Director General, Roy Gibson. The HQ of ESA's telecoms satellite directorate will move to the UK. This facility will be ESA's European Centre for Space Applications and Telecommunications (ECSAT).

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. Work is planned to coordinate national ground infrastructure to support the exploitation of space data, and fresh investments are occurring – for example a ground terminal for the future European Data Relay Satellite System (EDRS). Requirements for other national infrastructure are emerging – for example a spaceport for sub-orbital space tourism and a collaborative ground segment to exploit the next generation of missions. The Agency leads these discussions with the public sector including the Local Enterprise Partnerships (LEPs) and the Devolved Administrations.

Delivering our outcomes

We work to achieve five primary outcomes:

Outcome 1

We will have clear and effective 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 space will be effective, targeted and 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.

Our approach to achieving these outcomes is underpinned by a sixth outcome:

Outcome 6

The UK Space Agency will have the operational capability, capacity and culture to deliver the Civil Space Strategy 2012-2016.

We have clear objectives for our outcomes and in this document we describe the Key Performance Indicators (KPIs) that will enable us to chart our progress towards the delivery of those outcomes. We also have a metric for each KPI, demonstrating how we will measure our performance against targets. This allows our staff to see how their personal effort contributes to outcomes and explains our progress to stakeholders, customers and our home department. The breadth of the Agency's work is so great that not every single action the Agency is making is listed here: instead, a representative set of KPIs and metrics are presented.

Throughout the year, it is likely that there will be emergent objectives and opportunities that will contribute to the achievement of our overall outcomes. It is important to ensure that we are agile to capitalize on these opportunities when they arise. For example, last year we established a bilateral relationship with CNES allowing UK involvement into two French led earth observation projects.

In delivering the Agency's Key Performance Indicators, a comprehensive risk management process (overseen by the Audit Committee) is employed to help us identify risks and take appropriate mitigation measures.

Managing our resources and increasing efficiency

The UK Space Agency has an administration budget 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 space research 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 around 1%, demonstrating a high level of efficiency among BIS partner organisations. The Agency seeks efficiency measures wherever possible. For example, a re-tendering of the CEOI programme in 2013 will reduce programme management costs by £740k a year which is being re-invested in programme delivery. The Agency also presses for efficiencies and reform of ESA working through its governing Council (represented by the Chief Executive) and its Administration and Finance Committee (represented by its Chief Operating and Finance Officer). At present, ESA is working towards a new 85/15 model to reduce its internal costs.

All the finance figures are subject to revision.

Table 1 - Income and Expenditure Plan

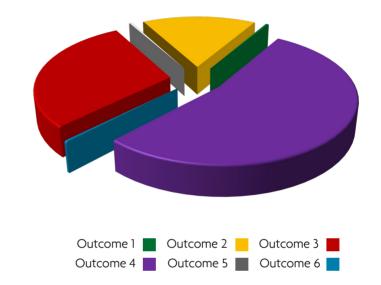
Allocation by DEL & AME	2014-15 £'000	2015-16 £'000
Departmental Expenditure Limit (DEL) Resource Allocation	188,083	170,200
DEL Capital Allocation	137,000	166,100
DEL Administration Allocation	3,675	3,675 ¹
Annually Managed Expenditure (AME)	736	756
Total	329,494	340,731
Allocation by Expenditure Category	£'000	£'000
International Programmes ²	254,221	264,300
National Programmes ³	70,862	72,000
Other Costs	4,411	4,431
Total	329,494	340,731

¹ Admin allocation(s) for 2015/16 still to be announced formally, planning assumption therefore used for purposes of this table.

- ² Includes new funding, £80m over five years, for the development of a programme that solves development issues using satellite applications (KPI 4.2.1).
- ³ Includes new funding for the SABRE programme, leveraging significant co-funding with industry, subject to a fully endorsed business case (KPI 4.1.6).

Chart 1 - Budget expenditure by outcome

This chart illustrates how we invest our budgets to deliver our Outcomes for space.

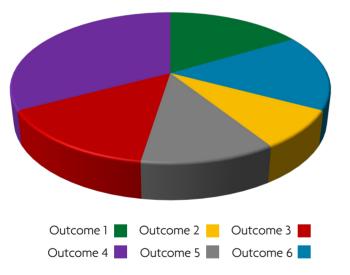


Staff resources

The table below shows staff resources (approximately 60 staff) aligned across our outcomes. We have taken the necessary steps and difficult decisions concerning our staff resource to allow us to deliver the full set of ambitions in this Corporate Plan. We are seeking to maintain a flexible workforce through a combination of fixed term contracts, secondments and tight manpower controls.

Chart 2 - How Full Time Equivalents (FTE) are deployed by outcome

This diagram is intended to illustrate the balance of staff resource investments by outcome for space. Given the breadth of the activities to be undertaken, specialist nature, and size of the Agency individual staff will be working across a range of outcomes.



Outcome 1: We will have clear and effective 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.

Objectives	KPIs	Metrics (2014-15)
 1.1 To develop effective UK space policies to underpin actions and investments in space. To work in partnership with our stakeholders to develop policies, seeking wider advice as appropriate. To clearly articulate the Agency's role in delivering these policies. 	1.1.1 A corporate plan that translates the UK Civil Space Strategy 2012-16 into action.	Corporate Plan 14/15 issued by Quarter 1.
	1.1.2 A National Space Policy setting out the responsibilities of all actors.	National Space Policy published with action plan for implementation by Quarter 2.
	1.1.3 Effective exploitation of ESA membership.	Establish UK positions for policy and programme issues at ESA Council of Ministers 2014, by Quarter 3.
	1.1.4 Influence in the future relationship between ESA and European Union.	An agreed outcome of the ESA/EU debate which is compatible with UK view, by Quarter 3.
1.2 To develop and maintain an effective and up-to-date evidence base to inform our advice, activities, policies and decisions, strengthening the Agency's ability to undertake economic and market analysis.	1.2.1 Updated metrics on size and health of UK space sector.	Undertake industry size and health survey, by Quarter 4.
	1.2.2 Ensure strategy, policy development and investment is evidence based.	Strengthen industrial policy team with an economics and market analyst capable of leading business case work, by Quarter 2.
		Complete and publish a review and impact assessment (including case studies) of Phase 1 of the NSTP, by Quarter 2.

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 UK, the UK Space Agency works for the Government and country's space sector, both at home and abroad. Effective representation requires the UK Space 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.

Objectives	KPIs	Metrics (2014-15)
2.1 To influence the development of National, European and International emerging space policies and programmes.	2.1.1 Ensure effective delivery of ESA investments in both the mandatory and optional programmes. Exert influence within ESA boards in order to align programmes with UK interests.	Achieve an overall geographical return factor of 1.0, by Quarter 4.
	2.1.2 Ensure effective delivery of EU space programmes. Exert influence within EU space programme committees in order to align the programmes with UK interests.	Ensure the UK is in a position to agree EU regulation for Copernicus and any programme actions for Space Surveillance and Tracking, by Quarter 2.
	2.1.3 Ensure the Government's new science and innovation policy takes account of the opportunities and needs of the space sector.	Relevant references to space activities in policy statements, by Quarter 3.
2.2 To implement key objectives of the UK Space Agency Earth Observation strategy, published in 2013.	2.2.1 Build on UK expertise to establish leadership in space- based climate services.	Action plan published, by Quarter 2.
2.3 To 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.	2.3.1 Ensure Outer Space Act 1986 licence applications are processed efficiently.	90% of regulatory casework meets published deadlines, by Quarter 4.
	2.3.2 Reform Outer Space Act 1986 by introducing an upper limit on liability for UK Operators.	Manage reform process to conclusion, by Quarter 4.
	2.3.3 Ensure UK regulatory environment that supports industry and is internationally competitive.	Set up a Space Regulatory and Spectrum Group by Quarter 3.
	2.3.4 Position the UK to successfully exploit the Galileo Public Regulated Service by establishing an effective and proportionate regulatory regime for PRS users and manufacturers.	Prepare the statutory instrument to take relevant regulatory and enforcement powers for the Secretary of State, by Quarter 4.
	2.3.5 Review the UK approach to CubeSats and smaller satellites.	Guidance published on UK Space Agency website by Quarter 4.

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

The UK Space Agency has 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 public sector users.

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, and the changing needs of the sector will be crucial in educating the scientists, engineers and professionals of the future will be crucial.

Objectives	KPIs	Metrics (2014-15)
3.1 To ensure UK space companies, and companies exploiting space assets have the environment to foster growth.	3.1.1 Work with industry to deliver the most important recommendations of the refreshed Innovation and Growth Strategy.	Agree with stakeholders the top three priority actions from space IGS Growth Action Plan which the Agency will progress, by Quarter 1. Manage and monitor these actions through the year, by Quarter 4.
	3.1.2 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 UK Space Agency positions for World Radio Conference 15 which adequately incorporate the views of the space community, by Quarter 4. Agree an approach with Ofcom on public sector spectrum charging for space use, by Quarter 4.
	3.1.3 Work with the Civil Aviation Authority, other Government Departments, and industry to provide a framework for commercial space operations and identify the location of a UK spaceport.	Publish outcome of space plane regulation study, by Quarter 1. Subject to budget allocation, establish a plan leading to space plane operation in the UK by 2016, by Quarter 3.
	3.1.4 Support the development of a vibrant regional space SME sector.	Collaborate with 3 LEPs/ Devolved Administrations to identify and implement specific opportunities to use space as a focal point for delivering their economic plans by Quarter 4, focusing on business incubation, skills needs, inward investment and alignment of local and national business support.

Objectives	KPIs	Metrics (2014-15)
3.2 To inspire and enable public and private sector take-up of space-derived products and services.	3.2.1 Expand knowledge transfer activities in space and align industries through joint activities with ESA and other UK organisations.	Hold at least 4 knowledge exchange/ technology transfer events, by Quarter 4.
	3.2.2 Inspire and enable uptake of space services and applications across the public sector.	Deliver Year 1 Space for Smarter Government Programme in collaboration with the Catapult to schedule and budget, including producing a road map for the use of space 2015- 2020 for 4 public sector themes by Quarter 4.
3.3 To use space as an inspiring tool to attract young people towards STEM subjects, to	3.3.1 Deliver an effective education, skills and outreach programme for 2014/15 including ESERO; Space Academy; Space for All; Mission-X.	Engage over 80,000 people in space education, skills and outreach activities, by Quarter 4.
inform parents and children about the role of the UK in	3.3.2 Exploit the education and inspiration value of UK astronaut mission to the International Space Station in 2015.	Reach 20 million people via press and media interventions by Quarter 4.
the global space industry and to encourage and train young people to contribute to the sector in the future.	3.3.3 Increase the number of high quality graduates and apprentices available to the UK Space Sector.	Agree scope of careers and skills portal with partners and representatives of UK Space Sector by End of Quarter 2. Develop a careers and skills portal by Quarter 4.
		Select 2014 ISU scholarships, by Quarter 1.
3.4 To act as a catalyst to ensure UK companies developing and exploiting space assets develop international links and secure a growing share of international programmes and markets.	3.4.1 Strengthen support to industry for exports and inward investments, working with industry and its membership organisations and across Government.	Establish a formal coordination agreement with United Kingdom Trade and Investment, by Quarter 2. Establish baseline level of space exports, via Size and Health Study, by Quarter 4. Agency International Policy team to have led two overseas trade missions, by Quarter 4. Three further international space companies to have chosen to establish a new/ expanded presence in the UK, by Quarter 4.
	3.4.2 Ensure government is an anchor tenant and drives growth through export of space products and services.	Ensure that where services developed under the 'Space for Smarter Government' Programme have export potential, this is a discriminator for Agency support, leading to two export-ready services by Quarter 4.

Objectives	KPIs	Metrics (2014-15)
3.5 To increase the national capability and infrastructure to enable UK organisations to research and compete in growing	3.5.1 Work with industry to support investment in new national space facilities needed to support the growth agenda.	Update national facilities roadmap, by Quarter 2. Select and initiate next national facility investment, by Quarter 4.
international markets.	3.5.2 Develop a UK collaborative ground segment so that the UK community can access and exploit Copernicus, ESA and other EO programme data.	Ensure the UK Copernicus collaborative Ground Segment is in place and that the UK has access to Sentinel-1 data, by Quarter 4.
3.6 To commence work to implement a National Space Security Policy which increases resilience and enhances national security whilst enabling industry and academia to exploit industrial and scientific opportunities.	3.6.1 Secure cross government consensus and Ministerial endorsement for an agreed programme to implement the NSSP.	Key deliverables for implementation agreed with relevant government departments by Quarter 3.

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

Objectives	KPIs	Metrics (2014-15)
4.1 To ensure UK investments in ESA, the EU and our national programmes are targeted and well managed.	4.1.1 Building on the science capital consultation document, develop high quality business cases for the Government's 7 year Science capital programme, coordinating with research councils and other departments.	Agree with Government fresh investment in the Agency's top priority capital programmes, by Quarter 4.
Ensure that UK scientists, industry users, and other stakeholders benefit from these investments.	4.1.2 Support expansion of ESA presence at the Harwell Oxford Space Cluster towards the goal of a dedicated facility (ECSAT) with 100 staff, by end of 2015.	Building works commenced, by Quarter 1. Secondary legislation for Hosting Agreement concluded by Quarter 4.
Provide vision and leadership for the development of the UK Space Gateway based at Harwell Oxford.	4.1.3 At least 500 staff employed in labs, facilities, agencies and businesses located at the UK Space Gateway by end of 2015.	In excess of 350 staff working at UK Space Gateway, by Quarter 4.
	4.1.4 Deliver an excellent national programme in space science, Earth observation, exploration and technology.	Determine UK contribution to Plato mission by Quarter 1. Select next projects under CEOI, by Quarter 2 Complete BepiColombo MIXS instrument, by Quarter 4 Maintain progress against schedule on instruments for Solar Orbiter, Euclid, Insight and ExoMars, by Quarter 4. Initiate UKube-2 by Quarter 4 Close-out remaining NSTP Phase 1 Projects, by Quarter 2. Launch a call for new projects under NSTP2 by Quarter 3.

Objectives	KPIs	Metrics (2014-15)
4.1 Continued	4.1.5 Co-fund with industry an innovative low cost SAR satellite .	Design phase of NovaSAR completed by Quarter 3.
	4.1.6 Co-fund with industry an innovative air-breathing rocket engine, SABRE.	Business case for SABRE, including milestones for foreseen private investment, agreed by BIS/HMT, by Quarter 1.
		EU State-aids case submitted, by Quarter 2.
	4.1.7 Align UK investment to exploit opportunities offered by the EU space programme.	Using NSTP Phase 2 funding, complete Phase 2 of the PRS Pilot projects, by Quarter 4.
	4.1.8 Manage delivery of ESA Programmes decided at C-Min 2012 to secure UK goals.	Work with ESA and industry to ensure strong UK participation in principal ESA projects, by Quarter 4.
		Work with ESA and other member states to secure remaining funding needed for ExoMars, by Quarter 4.
		Three further new projects under GSTP technology funding agreed with ESA, by Quarter 2.
4.2 To use space for global societal benefit	4.2.1 Develop a programme to apply space technology and applications in international development.	Programme launched, by Quarter 1. First projects selected and on track, by Quarter 4.
	4.2.2 Support the implementation of the International Charter on Space and Major Disasters (www. disastercharter.org).	UK funding in place by Quarter 1 and data available to relevant UK and international organisations on demand (continuous).

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 UK Space Agency's communications and outreach activities should 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.

Objectives	KPIs	Metrics (2014-15)
5.1 We will support key space-related events and conferences for decision makers, the public, industry and academia and promote the exchange of knowledge and ideas on the role of space in society and commerce.	5.1.1 Deliver a high profile space presence at the Farnborough International Airshow 2014.	Over 15 000 people visit the Space Zone of FIA 2014, by Quarter 2.
	5.1.2 Deliver a space education presence at the Big Bang science fair.	Over 60,000 people engaged through the Big Bang event, by Quarter 4.
	5.1.3 Coordinate a series of visits by policy makers to the UK Space Gateway.	100 government officials and other policy makers having made first visit to UK Space Gateway, by Quarter 4.
5.2 We will raise the profile of UK industrial, academic and scientific excellence in space to national, European and international audiences using a variety of events and channels		Transfer initial Agency web content to gov.uk platform, by Quarter 2. Engage over 750,000 people through the Agency website, Twitter, LinkedIn, Facebook, Flickr and
for clear, consistent messages.		YouTube, by Quarter 4.

Outcome 6: The UK Space Agency will have the 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.

Objectives	KPIs	Metrics (2014-15)
6.1 To have motivated and empowered staff with the skills to deliver current and future needs of their role, the Agency and the space sector.	6.1.1 Production of UK Space Agency Staff People Strategy.	Publish and implement the strategy by end of Quarter 3. Implement leadership development programme based on the Skills Audit and People Survey results by Quarter 3.
6.2 To have effective governance, planning, operational, robust risk management, internal control, security and financial systems to support the Agency's work.	6.2.1 Completion of the Agency change programme ('Arrow').	Formal close out of Arrow Programme, by Quarter 2.
	6.2.2. Agency programme, capital and administration budgets are appropriately deployed to deliver corporate plan objectives.	Effectiveness of in-year monitoring and end of year out-turn, by Quarter 4.
	6.2.3 Timely completion of Annual Report and Accounts and laying before Parliament in line with HMT best practice guidance.	2013/14 annual report and accounts signed off, by Quarter 1.
6.3 We will drive continuous improvement through our business and engage with wider efficiency reforms within BIS.	6.3.1 The Agency listens to its stakeholders in order to help refine our ways of working.	Undertake baseline stakeholder survey, by Quarter 2.
	6.3.2 Sharing delivery with other organisations to maximise efficiency.	At least 90% of our programmes in collaboration with other organisations.

Reporting our performance

We will measure and report on the impact we are making in implementing this plan through the key performance indicators ('KPIs') that we have defined for each outcome. We will monitor and report progress against KPIs on a quarterly basis at Executive Board and to the UK Space Agency Steering Board. We will also make available to the public on our website a summary of progress on these key measures. Our outcomes will continue to guide our activities over the medium term. We will undertake an annual review of these to update our objectives, KPIs and metrics to ensure consistency with available resources and government policy.

Acronyms

- **BIS** Department for Business Innovation and Skills
- **CEOI** Centre for Earth Observation Instrumentation Programme
- **CNES** Centre National d'Études Spatiales, France (English: National Centre for Space Studies)
- **DCMS** Department of Culture, Media and Sport
- **DECC** Department of Energy & Climate Change
- **Defra** Department for the Environment Food and Rural Affairs
- **DEL** Department Expenditure Limit
- DFE Department for Education
- **DFID** Department folr International Development
- EC European Commission
- **EU** European Union
- **ECSAT** European Centre for Space Application and Telecommunications
- **EDRS** European Data Relay Satellite System
- **EO** Earth Observation
- **ESA** European Space Agency
- **ESERO** European Space Agency Resource Office
- **ExoMars** Exobiology on Mars
- **FCO** Foreign and Commonwealth Office
- **GSTP** General Support Technology Programme
- HMT HM Treasury
- IASI- NG New Generation Atmospheric Sounder
- IGS Innovation & Growth Strategy
- **ISS** International Space Station
- **ISU** International Space University
- **JUICE** Jupiter Icy Moons Explorer
- **KPI** Key Performance Indicator
- **LEPs** Local Enterprise Partnerships
- LISA Laser Interferometer Space Antenna
- MFF Multiannual Financial Framework
- MoD Ministry of Defence
- **NovaSAR** Synthetic Aperture Radar
- **NSTP** National Space Technology Programme
- **SABRE** Synergistic Air Breathing Rocket Engine

STEMScience, Technology, Engineering, MathsSTFCScience & Technology Facilities CouncilUKTIUK Trade and Investment

Annex 1 Corporate Governance

The UK Space Agency is an Executive Agency of the Department for Business, Innovation and Skills (BIS). 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 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.

The UK Space Agency Executive Board is chaired by the Chief Executive (CE). The Steering Board and Audit Committee advise the Chief Executive. UK Space Agency's Chief Executive is supported in his role of Agency Accounting Officer by three corporate governance groups: the Steering Board, the Executive Board and the Audit Committee.

Steering Board

The Steering Board provides advice and guidance to the Chief Executive. In accordance with the HMG guidance, the external members are appointed by BIS for a term of three years with the possibility of renewal. There are four Non-Executive Members who are independent; the remainder of the Board is made up of the Chief Executive (with Accounting Officer responsibilities), the Senior Information Risk Officer for the UK Space Agency, and a BIS representative.

All external interests are listed in the Register of Members' Interests and in the Related Party Transactions laid out within notes to the annual accounts. The 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 Steering Board was established in November 2011 and generally meets on a bi-monthly basis.

Executive Board

The Executive Board manages the day-to-day operations and activity of the UK Space Agency, including the provision of policy advice to BIS Ministers. The formal Accounting Officer role lies with the Chief Executive. The responsibilities of the Executive Board are to:

- deliver the UK Space Agency mission as detailed in its Corporate Plan by deciding overall programme priorities and resource allocation
- develop and maintain the mid-to-long term strategic direction and provided advice to ministers on civil space policy
- approve and implement effective financial (including Comprehensive Spending Review and subsequent estimates) planning
- have responsibility for the investment appraisal regime, including approving capital and revenue commitments under a threshold amount approved by BIS
- approve and implement robust and effective governance, including financial policies/procedures
- support and develop the appropriate advisory structures
- oversee stakeholder relationship management, including with central government
- oversee effective succession planning and approve appointments below director level
- define and cascade appropriate organisational culture and ethos
- make executive decisions on matters having a material impact on the organisation (including reputational, legal and regulatory) within the delegated authority granted by BIS
- approve legal and regulatory compliance policies, including Health and Safety
- approve HR policies
- oversee management of risk and the internal control framework.

The Chief Executive may delegate oversight of operational activity to directors.

The Executive Board meets generally every week dependant on availability.

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.

In accordance with the HMG guidance, the external members are appointed by BIS for a fixed term of three years, with the possibility of renewal. All Non-Executive members are independent and all external interests are listed in the Register of Members' Interests and in the Related Party Transactions laid in the notes to the annual accounts. A register of UK Space Agency Members' private, professional and commercial interests is maintained by the UK Space Agency.

In addition to the Audit Committee members and internal and external audit representatives as ex-officio members, the remainder of the Executive Board and the Head of Finance and Corporate Services attend. The Audit Committee generally meets on a quarterly basis but can meet more if required.

Summaries of Steering Board and Audit Committee meetings are posted on the Agency website.

Advisory committees

A set of stakeholder advisory committees provide scientific, technical and industrial advice to the UK Space Agency Executive. In addition, the Minister seeks advice via a high-level Space Leadership Council comprising representatives from industry, academia, and government.

The purpose of the UK Space Agency is set out in the Framework Document, which also sets out the Agency's governance arrangements, accountability and delegations. The Framework Document will be amended during 2014/15 in line with the Cabinet Office Governance Framework.

The UK Space Agency will continue to produce an Annual Report and Accounts which is audited by the NAO and laid before Parliament before the summer recess. Within this is an Annual Governance Statement which sets out the internal control procedures that have been operated by the UK Space Agency during the year in question, and details any improvement plans for the forthcoming year.

Annex 2 - Links to BIS Objectives

In May 2012, BIS published its Business Plan for 2012-2015 with the following five coalition priorities:

- 1. Knowledge and Innovation Promote excellent universities and research and increased business innovation
- 2. Skills Build an internationally competitive skills base and promote more opportunities for individuals in realising their potential
- 3. Enterprise Boost enterprise and make this the decade of the entrepreneur; and rebalance the economy across sectors and across regions
- 4. Trade and investment Stimulate exports and inward investment
- 5. Markets Create a positive business environment; and protect and empower consumers

The UK Space Agency links to the Department through the Knowledge and Innovation Group. The Group's purpose is to 'make the UK world class at enabling people, organisations and systems to create, disseminate and exploit knowledge for economic growth and benefit to society'.

The UK Space Agency contributes directly to this mission through its sector focused work on skills, research, innovation and growth. It also contributes to a range of objectives across BIS which underpin the delivery of the Government's Industrial Strategy.

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 support 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 regulatory environment for business resulting from the improve design and delivery of regulation
- strengthens outreach and education activities by raising the profile of the UK space programme within the public domain, and encouraging greater take up of STEM subjects.

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

Department for Business Innovation & Skills