

Defence Procurement Minister launches Defence Space Strategy

It's a huge pleasure to be here today on the next step in our execution of the Integrated Review, the Defence Command Paper and Defence and Security Industrial Strategy.

A lot has happened in Defence in the last year. From assisting in homeland resilience in issues as varied as vaccine delivery to Heavy Goods Vehicle support to the largest Royal Navy deployment in decades making our positive presence felt on the far side of the world.

Above all, as I speak, the Defence Secretary is meeting NATO partners, discussing the truly concerning situation on Ukraine's borders – the most serious threat of a major war on our continent since the fall of the Berlin Wall.

However the British people know that what they can always expect from UK Defence is calm, determined, delivery.

We are continuing to progress the positive future for Defence to ensure we can meet the threats of the future with the most modern, integrated, technologically advanced forces reaching out through every domain.

For hundreds of years we have faced down threats from land and sea. Over the last century we rose to the challenge of air warfare.

One of the threats of the future. A threat that has the ability to fundamentally threaten so many of our key interests in and from Space.

Building on our National approach published last year, we promised a Defence Space Strategy which I am proud to announce today.

We know the opportunities that space delivers from effective global communications through to ISR. We also know of the threat. Several states are pursuing hostile capabilities that can disrupt and deny others' use of space.

A few months ago, Russia recklessly destroyed an inactive satellite – sending debris spinning around the Earth and endangering the International Space station.

Just consider a simple fleck of paint travelling in space at five miles per second in Low Earth Orbit can cause huge damage to critical space assets.

But what we're talking about here with Russia's actions is at least 1,500 pieces of debris that we can track, its probably, ten times that amount, travelling at that speed through space, with potential to cause disastrous results to any space equipment with which it collides.

Such irresponsible actions underline the dangers in a domain on which we

place ever increasing reliance.

Satellite constellations in orbit link up almost every aspect of our daily lives, from mobile phones, the internet and television to transport networks, and the world's financial trading systems. Our allies and we rely on space to deliver secure global communications, provide surveillance intelligence and missile warning, as well as support our deployed forces globally.

So our new Defence Space Strategy sets out a plan for us to become more resilient, more robust and a more significant space player on the global stage. We've begun laying the groundwork. Last April we established a single joint UK Space Command that will conduct day-to-day space operations, deliver leading-edge capabilities and generate the Force structure we need. And last September, we published our first integrated National Space Strategy. It set out our ambition to strengthen the UK's status as a world-class space nation and become one of the most innovative and attractive space economies in the world.

Defence is integral to this ambition. So we've been investing to deliver. In addition to the £5 billion over 10 years already allocated to our future Skynet Satellite communications, a further £1.4 billion has been allocated to support defence operations over the next decade.

Our priorities are set out within today's strategy.

£970 million will go into our new ISTARI programme. This puts in place the foundations of a next-generation constellation of ISR in Low Earth Orbit. They will be fitted with a variety of sensors which can 'see' across multiple aspects of the spectrum – allowing for 24/7 observation capabilities whatever the weather.

Related to this, we are investing £61 million in a programme called TITANIA, which will experiment with optical laser communication technology. This will enable the transfer of data in, to and from Space at an equivalent capacity to high-speed broadband.

£85 million is destined to develop our Space Domain Awareness capabilities. Enhancing our ability to properly understand activity in space stretching as far as geostationary orbit and beyond – more than 36,000km from Earth. Our Space Domain Awareness activity also includes close collaboration with our US and Australian partners on the Deep Space Advanced Radar Capability programme announced last July by the Defence Secretary.

And £135 million has been allocated to boost our Command and Control capabilities over the decade. Besides underpinning our new Space Command, this cash will deliver our AURORA programme. Developing the architecture on which we'll build game-changing apps so our commanders can make rapid decisions in real time.

Finally, we are investing £145 million on Space Control to explore capabilities that deliver carefully calibrated effects to protect our access to space and our operational independence.

Our ambitions don't end there and are not capped at £1.4 billion. So today I am delighted to announce we're going to invest a further £127 million over the next four years in Minerva. This project emerged from a Dragon's Den style process. Testing the great ideas that come through from the Defence Innovation Unit (DIU).

Minerva is about the best means to deliver the digital backbone upon which our space enterprise will depend. It is focussed on the processing power, the radio frequencies, the imaging capabilities, and the data streams to deliver space-based intelligence.

Not only will it make us fully interoperable – enabling us to tap into our key Space allies. But it will allow us to share what space-derived data we discover across every domain in a timely manner. We'll share what we know. They'll share what they know ...to our mutual benefit. Best of all we are working closely with UK companies to deliver it.

Together, MINERVA and ISTAR will form the building blocks of our Defence space ISR capability. Collectively they will help us learn lessons about how to spirally develop our capabilities in an agile manner – outpacing both the rapidity of technological advancement and potential adversaries.

As I hope I've begun to show, this strategy is about more than capabilities. It is about partnerships. Government working as one with industry and international allies. With this in mind, I am delighted to announce another really exciting innovation. Our Defence Science and Technology Laboratory (Dstl) is manufacturing a tiny shoe-box-sized satellite – otherwise known as Prometheus 2. Manufactured in the UK, it is operated by the company In-Space Missions, with ground station support from Dstl's international partners and Airbus Defence & Space UK.

Despite its tiny size, Prometheus's payload will include a Hyperspectral Imager from Cosine Measurement Systems, Global-Positioning receivers from the University of New South Wales, a wide field-of-view imager from Canadensys, and multiple Software-Defined-Radios from Airbus UK. This exciting project is hugely innovative. We're testing the concept, experimenting, pushing the boundaries. Investing to stay on the cutting edge.

And, on top of this huge pipeline of space investment coming down the track, we've got our SKYNET 6A satellite, being built by Airbus Defence and Space. It remains on track for launch in 2025.

These investments are about security. But they are also about prosperity. Government has already helped create a thriving UK space sector worth over £16.4 billion per year, with a strong talent pipeline employing over 45,000 people in fields from satellite manufacturing to research. This makes the UK an excellent location for space businesses.

The funding I've announced today represents a significant boost for the UK space industry and will play a key part in stimulating wider innovation, commercialisation, and growth.

Rest assured, we will continue working ever more closely with industry to develop the space technologies needed to maintain our advantage and amplify our competitive edge. Knowing that, as we do, our innovative space research and development will inspire a new generation and enhance the expertise of an entire sector.

So, today we're boldly pushing back the frontiers of our Defence space ambitions. Not just enhancing our military resilience, strengthening our security, and furthering our prosperity. We are applying rocket boosters to the UK's innovative instincts and helping our space sector surge ahead of the threats we'll face in the future.