

Press release: Space sector to benefit from multi-million pound work on UK alternative to Galileo

- Government to invest £92 million of Brexit readiness money on plans for independent satellite system
- 18-month study will look at the design and development of UK programme
- This will inform the decision to create the system as an alternative to Galileo
- The UK Space Agency will lead the work with full support from the Ministry of Defence

The money has been allocated from the £3 billion Brexit readiness fund announced at last year's Budget and will be rolled out over the coming months.

Satellite navigation systems like GPS are increasingly important for commercial, military and other critical applications, from guiding aircraft, ships and emergency services to helping millions of people find their way on car journeys. A recent government study estimated that sustained disruption to satellite navigation would cost the UK economy £1 billion per day.

The government has been clear that the UK wants to remain involved in the Galileo programme, and is negotiating with the European Commission to this end.

But without the assurance that UK industry can collaborate on an equal basis now and in the future, and without access to the necessary security-related information to rely on Galileo for military functions such as missile guidance, the UK would be obliged to end its participation in the project.

The UK Space Agency is leading this phase of the work to look at options for a British Global Navigation Satellite System, which would fully meet UK security requirements and support the UK's sovereign space and cryptography sectors. This significant new investment will develop specific technical proposals with the Ministry of Defence playing a full role in support.

The 18-month engineering, design and development project will deliver a detailed technical assessment and schedule of a UK global positioning system.

This would provide both civilian and encrypted signals and be compatible with the US GPS system.

UK industry has been instrumental in developing Galileo technology and encryption, and this experience will be used in developing the alternative, with a number of multi-million-pound contracts available for British space companies.

Business Secretary Greg Clark said:

"Britain is a world leader in the space industry and satellites. We are investing in an alternative option to Galileo to ensure our future security needs are met using the UK's world-leading space sector.

"Our position on Galileo has been consistent and clear. We have repeatedly highlighted the specialist expertise we bring to the project and the risks in time delays and cost increases that the European Commission is taking by excluding UK industry.

"Britain has the skills, expertise and commitment to create our own sovereign satellite system and I am determined that we take full advantage of the opportunities this brings, backed by our modern Industrial Strategy."

Defence Secretary Gavin Williamson said:

"The danger space poses as a new front for warfare is one of my personal priorities, and it is absolutely right that we waste no time in going it alone if we need an independent satellite system to combat those emerging threats. This alternative system and the UK's very first Defence Space Strategy which I will launch later this year will be a further boost to military skills, our innovative businesses and our genuinely world-leading role which has seen us make such a key contribution to Galileo."

Dr Graham Turnock, CEO of UK Space Agency said:

"We remain confident in the strength of our space sector and look forward to working in partnership with them on the exciting prospect of a national satellite navigation system."

Even if the decision was taken not to create a UK independent satellite system and the UK remained a full member of Galileo post-Brexit, this work would support UK jobs and expertise in areas including spacecraft and antenna design, satellite control systems, cryptography and cyber security. It will also support the UK's growing space sector.

Growing space sector

Britain's space industry is going from strength to strength. Last week (22 August) the European Space Agency's (ESA) revolutionary British-built wind measuring spacecraft Aeolus was launched. The spacecraft was built by Airbus Defence and Space in Stevenage and other British businesses provided critical elements to the mission, including a camera, software and propulsion systems.

At the Farnborough International Airshow in July, the government committed £31.5m to support the development of a spaceport in Sutherland in Scotland and commercial operations from the site, which could be the first in Europe and will see rockets lift off from UK soil.

Horizontal launch sites also have significant potential in a future UK spaceflight market, which could attract companies from all over the world to invest in Britain. Sites such as Newquay, Glasgow Prestwick and Snowdonia will be boosted by an additional £2m fund to grow their sub-orbital flight, satellite launch and spaceplane ambitions.

Low cost access to space is important for the UK's thriving space sector which builds more small satellites than any other country, with Glasgow building more than any other city in Europe.

The UK Space Agency is driving the growth of the space sector as part of the Government's Industrial Strategy with major initiatives including the £99m National Space Test Facility at Harwell, and the UK continues to be a leading member of ESA, which is independent of the EU.

News story: Uk gifts historic SS Mendi Bell from WW1 to South Africa

Updated: Updated image.

Prime Minister Theresa May presented the bell to South African president Cyril Ramaphosa as an example of the shared heritage that underpins the close relationship between the two nations.

The sinking of the SS Mendi in the English Channel on 21 February 1917, a disaster that resulted in the loss of 616 South Africans, is a significant historical moment in the country's history. It is commemorated by South African Armed Forces Day held on the date of the disaster and commonly referred to as Mendi day.

Press release: Theresa May to lead ambitious three-nation trip to Africa

Theresa May will lead an ambitious trip to Africa this week (24 to 26 August) on her first visit to the continent as Prime Minister.

She'll be the first British Prime Minister to visit Sub-Saharan Africa since 2013, and the first to go to Kenya for over 30 years.

This visit comes at a time of enormous change across Africa with a unique opportunity, as the UK moves towards Brexit, for a truly Global Britain to invest in and work alongside African nations, with mutual benefits.

The Prime Minister's central message will be focused on a renewed partnership between the UK and Africa, which will seek to maximise shared opportunities

and tackle common challenges in a continent that is growing at a rapid pace – from the Sahara to South Africa.

She will use a speech on the opening day of the visit in Cape Town to set out how we can build this partnership side by side with Africa, particularly by bringing the transformative power of private sector trade and investment from the UK to a continent that is home to 16% of the world's people but just 3% of FDI and 3% of global goods trade.

As Africa seeks to meet the needs of its growing population the visit will also emphasise that it is in the world's interest to help secure African stability, jobs and growth because conflict, poor work prospects and economic instability will continue to encourage migration and dangerous journeys to Europe.

Because nations cannot prosper without security, the Prime Minister will also use the visit to announce further support to tackle instability across the region.

Prime Minister Theresa May said:

Africa stands right on the cusp of playing a transformative role in the global economy, and as longstanding partners this trip is a unique opportunity at a unique time for the UK to set out our ambition to work even closer together.

A more prosperous, growing and trading Africa is in all of our interests and its incredible potential will only be realised through a concerted partnership between governments, global institutions and business.

As we prepare to leave the European Union, now is the time for the UK to deepen and strengthen its global partnerships. This week I am looking forward to discussing how we can do that alongside Africa to help deliver important investment and jobs as well as continue to work together to maintain stability and security.

I am proud to be leading this ambitious trip to Africa and to become the first UK Prime Minister in over 30 years to visit Kenya.

The Prime Minister will be joined by a business delegation made up of 29 representatives from UK business – half of which are SMEs – from across all regions of the UK and its devolved administrations. The delegation shows the breadth and depth of British expertise in technology, infrastructure, and financial and professional services.

Delegates include:

- the London Stock Exchange
- Cardiff-based cooling technology firm Sure Chill
- solar tech provider Northumbria Energy from North Tyneside

- London-based start-up Farm.ink who have created a knowledge-sharing mobile platform for farmers
- Northern Irish agri-tech leader Devenish Nutrition
- the world-renowned Scotch Whisky Association and Midlands manufacturing giant JCB

Also travelling are Trade Minister George Hollingbery and Minister for Africa Harriett Baldwin. Secretary of State for Wales Alun Cairns will join the visit in South Africa to support the Welsh companies in the business delegation, while the Lord Mayor of London Charles Bowman is also accompanying the Prime Minister.

The Prime Minister will begin her trip in Cape Town in South Africa where she'll see President Cyril Ramaphosa and meet young people and business leaders.

While in South Africa the Prime Minister will present the Mendi bell to President Ramaphosa in a ceremony at Cape Town's presidential office the Tuynhuys – over a century after it was lost in a shipwreck.

Over 600 troops, the majority black South Africans, died when the Mendi tragically sank in the English Channel in 1917, on their way to join the Allied forces on the Western Front. It was the worst maritime disaster in South Africa's history, and the Mendi has become a symbol of the country's First World War remembrance.

In Nigeria the Prime Minister will meet President Muhammadu Buhari in Abuja and spend time in Lagos meeting victims of modern slavery – a cause Theresa May has worked passionately to tackle.

In Nairobi she will meet President Uhuru Kenyatta and see British soldiers training troops from Kenya and other African countries in the techniques needed to identify and destroy improvised explosive devices before they go to fight Al-Shabaab in Somalia.

She will also commit to helping support the next generation of energetic, ambitious young Kenyans as they seek to build a more prosperous country in the years ahead.

[News story: RAF typhoons investigate Russians over Black Sea](#)

Launching from the Romanian Mihail Kogălniceanu Air Base, the RAF Typhoons responded yesterday (August 23) to a Russian Be-12 heading south west over the Black Sea from Crimea. It's the second time in a week that RAF jets, on NATO's Air Policing mission, have been scrambled to deter provocative Russian

aircraft and reassure Romania and NATO allies.

Defence Secretary Gavin Williamson said:

Our commitment to NATO and European security is unwavering. Whether in the skies over the Black Sea and the Baltic, or on the ground in Estonia our actions send a clear message – we are collectively ready to respond to any act of aggression and will support our Eastern European allies to deter any threats faced.

1 (Fighter) Squadron, based at RAF Lossiemouth, is deployed to Romania as part of the NATO 'Enhanced Air Policing' mission, where assistance is provided to the Romanian Air Force's own fleet of fast-jet aircraft.

A Typhoon pilot from 1(Fighter) Squadron, attached to 135 Expeditionary Air Wing (EAW) and on Quick Reaction Alert duty when the scramble was called said:

"We launched in response to a Russian Be-12 aircraft that was manoeuvring over the Black Sea. It is exactly what the RAF has been brought to Romania to do and it felt great to have been able to contribute towards the mission."

[News story: HMS Queen Elizabeth sets off for F-35B fighter jet trials](#)

Eight years since a British aircraft carrier last flew a fast jet from her decks, the 65,000-tonne carrier will embark two F-35B test aircraft, from the Integrated Test Force (ITF), based out of Naval Air Station Patuxent River, Maryland.

Around 200 supporting staff, including pilots, engineers, maintainers and data analysts will be joined by two 'orange wired' test aircraft, belonging to the ITF, which are expected to conduct 500 take offs and landings during their 11-week period at sea.

The aim of these initial, or 'developmental' trials are to ascertain, through the specially equipped aircraft and sensors around the ship, the operating parameters of the aircraft and ship, in a range of conditions. Similar successful trials were conducted by HMS Queen Elizabeth at sea earlier this year for Rotary Wing aircraft.

Defence Secretary Gavin Williamson said:

HMS Queen Elizabeth is a true statement of our national power, and

the whole country can be proud to see this magnificent symbol of our engineering prowess and international ambition leaving port to sail onto the world stage.

Her voyage to America not only shows her global reach, but strengthens our special relationship with the US Forces who we have worked hand-in-hand with on this iconic programme. As she sails along the east coast of the USA, she will signal our determination to keep fighting alongside our allies in all corners of an ever more complex and uncertain world.



F-35B aircraft will join HMS Queen Elizabeth when she arrives in the USA. Crown copyright.

Four F 35B Lightning developmental test pilots, who are members of the ITF, will embark to fly the aircraft; three British, one American. The British personnel comprise a Royal Navy Commander, a Squadron Leader from the Royal Air Force and one civilian test pilot. They will be joined by a Major from the US Marine Corps.

The trials follow the recent arrival into the UK of the first joint Royal Navy, Royal Air Force F-35B jets, based at RAF Marham. 'Operational testing', utilising British F-35B aircraft are scheduled to take place on board HMS Queen Elizabeth next year.

The deployment, known as 'WESTLANT 18', will be the first-time HMS Queen Elizabeth will have sailed across the Atlantic. As well as the vital deck trials, it will also involve exercises to prove the ability to operate with

other nations' maritime and aviation assets, as well as the landing of Royal Marines and their equipment ashore in the United States, to conduct training with their US counterparts.

HMS Queen Elizabeth Commanding Officer, Capt Jerry Kyd said:

This deployment to the United States will be another first for my ship. Crossing a major ocean with 1500 sailors, aircrew and Marines embarked and the spectre of the first F-35B Lightning landing on the deck in September is very exciting for us all.

It has been an incredible journey since we left Rosyth just over a year ago and we are all looking forward to this next, seminal chapter in HMS Queen Elizabeth's life.



HMS Queen Elizabeth departs for the USA to land fast jets on deck for the very first time. Crown copyright.

As the ship's work-up continues, so too does the regeneration of the UK's Carrier Strike capability. Commander UK Carrier Strike Group (COMUKCSG), Cdre Andrew Betton, will take command of the ship and other units of his task group, embarking in HMS Queen Elizabeth with his Carrier Strike Group headquarters staff.

He said:

As a critical step towards delivering the UK's new Carrier Strike Group, this deployment demonstrates the astonishing collaborative effort that will enable the new F-35 jets to fly routinely from our Queen Elizabeth class aircraft carriers.

At the heart of the Maritime Task Group, the aircraft carrier is well protected and sustained, ready to operate around the world as a potent and exceptionally flexible instrument of our foreign policy. These first F-35B embarked trials in a UK aircraft carrier are not only key to future operational success, but represent an iconic moment for the modern Royal Navy.

The ship will conduct trials in UK waters over the coming days, before departing for the USA later this month. She will be joined by RFA Tiderace and Plymouth-based type-23 frigate HMS Monmouth, as well as Merlin Mk2 helicopters from 820 Naval Air Squadron, RNAS Culdrose, Mk 4 Merlins from 845 Naval Air Squadron, RNAS Yeovilton and a contingent of Royal Marines from 42 Commando, Plymouth.