UKSPACE
THE SPACE TRADE ASSOCIATION
Promoting space jointly with ADS and techUK

Achieving a Commercial and Sustainable UK Launch Capability

Establishing a space-launch economy presents the UK with ***an opportunity for growth which appears once a generation.*** *This goal is in sight, with work in train to rebuild the skills and expertise that were lost when, in the 1970s, we became the only nation in the world to develop, and then surrender, this key capability. To achieve this* ***we need to retain focus and redouble our collective efforts across government and industry****, with a clearer plan, and supporting actions to deliver this exciting opportunity and establish the UK as the leading European launch nation, and deliver wider economic and social benefits to the country now and into the future.*

The very successful European launcher programme is an example of the economic benefit delivered by launch. The UK opted to not take part; a key reason why the space sector in the UK is smaller than Germany and France for example, giving them a smaller gap to close to overtake the UK's launch ambitions. We must work hard to overcome this; failure on delivering launch would deal a blow to plans to grow our share of the global space sector.

Why is UK Launch essential?

Launch is a requirement for any nation wishing to harness space technology and data for the benefit of society – we cannot continue rely on other nations to deliver this. Launch is a prerequisite for our nation's plan for:

1. ***Security.*** *Strategic and responsiveness to geopolitical events; an ability to deliver space missions wholly indigenously. An absence of which leaves the UK vulnerable.*
2. ***Genuine growth and increased productivity****. Alongside creating the environment to pull through demand from international launchers, the development of UK spaceports has triggered rapidly growing interest in UK manufacturing of vertical launch vehicles. This new element to UK industry is, creating a vertical supply chain with UK vehicles able to deploy UK built satellites.*
3. ***Serving the burgeoning LEO constellation market****. The UK could play a vital role in constellation replenishment, responsively launching satellites into the orbits required to maintain services, and supporting telecommunications and Earth Observation; areas in which we already excel.*
4. ***Wider UK Benefits****. A UK launch capability is fully aligned with the UK Space Agency's value proposition, integral to* ***delivering missions & capabilities*** *(using in-orbit demonstration missions to scale UK scientific advances and support a more dynamic technology environment taking research from the lab to commercialisation more quickly, and supporting sustainability where 60% of climate science data is required from space);* ***championing space*** *(by providing a totemic and inspiring vision of the UK as a space actor to young people across the country, helping solve the STEM challenges facing the space sector and wider UK Tech economy) and* ***catalysing investment into the UK space sector*** *(both through developing launch vehicles and providing services to the global market).*

Re-ignite the Plan

As one of the largest space-faring nations, the UK can and should have indigenous control over its ability to access space, realising the growth opportunity this offers. Our geographical location gives us an ideal opportunity to be leaders in this new commercial space world, serving not just the UK but a burgeoning global market. However, our nation is in danger of being left behind competitors and missing this opportunity; satellite services underpin every other sector of our economy to the value of £370bn (17.7% of UK GDP)[1], and the UK is ranked number three in the deployment of satellites (653), however the economic and wider benefits from launching these satellites goes to other nations rather than the UK.

We have taken great steps in the enablement of UK launch since 2018 (legislation, regulation and initial seed funding), we now need to renew our focus to complete the journey to operational and sustainable commercial launch from the UK, which could be less than two years away.
Rival nations have committed higher levels of investment, allowing them to steal a march on the UK. The initial impetus ('creating the conditions') was welcome, but needs to be followed up with renewed ambition, clear

[1] *Size & Health of the UK Space Sector report, 2022*

policy direction and an acceleration of delivery. The rapidly growing UK launch industry stands ready to work with Government to achieve these ambition, and believes that the right collaborative solutions can lead the UK to re-gain the initiative and put our nation in pole position to grow existing markets, address new markets, along with generating a strategic capability that will unlock growth for decades to come.

An Action Plan for Success

A refreshed policy approach needs to addresses:

- *Expanding the type of launch services from UK spaceports , to widen the market and customer reach, looking to constellation replenishment, (IOSM, VLEO) In Orbit Servicing and Manufacture, Very Low Earth Orbit; agile and open to new opportunities.*
- *Support industry via government procurement – including use of UK launch to support the delivery of satellites aimed at public services, in-orbit demonstration and skills/ education.*
- *Delivering commercially sustainable UK spaceports.*
- *Backing indigenous vehicle development, alongside more proven technologies, – recognising that delivers additional jobs, growth and social benefits to the UK.*
- *Reviewing legislation and licensing to make the UK a more competitive location.*

To deliver this bold new world, we encourage UK Government to take the following actions:

1. *Greater accountability for delivery. Make a single minister responsible, along with a delivery team at the UK Space Agency with a clear mandate and sufficient funding. Join up the responsibility to ensure the regulation works to catalyse investment and enable programme delivery.*
2. *Fully exploit the role that UK launch can play in, and benefit from, the UK Space Agency's value proposition to 'champion space'.*
3. *Match the ambition of other European nations with proportional spending to accelerate the emerging UK launch vehicle sector, to deliver the goal of UK vehicles launching from UK spaceports*
4. *Enact an active procurement plan from government to industry, without which no nation has ever delivered launch capability. Treasury should consider business cases rapidly and prioritise investment for launch in the next spending review*
5. *Create incentives for UK satellites to be launched from the UK; both primary launch, and replenishment of constellations.*
6. *Ensure UK regulations implement lessons learned from the first launches and licenses, and are quickly updated accordingly to ensure that the UK regulatory environment is attractive and competitive internationally, and is reviewed as required, not on an arbitrary timescale.*
7. *Work with industry to frame the national Business Case for launch, ensuring that we have the resources required to complete the journey we have embarked upon, ahead of our competitors.*

The UK must step up to a clear and ***championing policy, and delivery plan,*** *focused on making the UK* ***the European leader in space launch, in line with the ambition set out in the UK Government's National Space Strategy.*** *The creation of sovereign, sustainable and resilient commercial launch capability is the national 'prize', closing a gap in the UK's space value chain and enhancing all other parts of that chain. Our national ambition should be to conduct regular suborbital and orbital launches from the UK by 2025, and winning the European space-race for launch. While the cost of failure is high, the modest price for UK launch capability can yield success. It holds within in transformative and life-changing potential: for our nation, our economy, and our society.*