



Scottish Affairs Committee

Rt Hon Alister Jack MP
Secretary of State for Scotland

Andrew Griffith MP
Minister of State
Department for Science, Innovation and Technology

Via email

24 May 2024

Dear Alister and Andrew,

As you know, the Scottish Affairs Committee opened an inquiry into Scotland's space sector on 22 June 2023. Since then, the Committee has received over 20 pieces of written evidence from stakeholders, held six oral evidence sessions as part of the inquiry, and conducted visits to Glasgow, Shetland and the United States to explore the challenges and opportunities for the sector. We are very grateful to all who contributed to our inquiry.

Given the imminent dissolution of Parliament ahead of the General Election, the Committee has not had an opportunity to consider a detailed set of conclusions and recommendations for this inquiry. We have therefore decided to write to the UK Government to set out some of the most important messages that have arisen during the course of our work, and highlight areas where we believe action is most needed. The Committee very much hopes that, regardless of the outcome of the General Election, the UK Government will bear in mind our observations when taking future decisions about how to support Scotland's space sector.

Ambition and action

The overwhelming message from our inquiry is the enormous potential of Scotland's space sector to build on its impressive successes so far. We have met with businesses, educational institutions, charities and public sector bodies who have all communicated this to us. Glasgow already builds more small satellites than anywhere else in Europe, and Edinburgh is pushing to be seen as the continent's space data capital. The expected achievement of launch capability in the near future will mean that Scotland is represented at every stage of the end-to-end value chain, and we urge the UK Government to take full advantage of this selling point in promoting Scotland at home and abroad.

At the same time, it has also been made acutely clear to us that complacency is not an option. In particular, we have heard that other countries are investing in their own space sectors, and the UK Government cannot risk Scotland losing its competitive edge. As AAC Clyde Space put it to us, unless the UK follows other countries in investing in space, "we risk industry falling behind and losing competitiveness built over decades".

During the course of our inquiry, we have considered in detail the UK Government's National Space Strategy (NSS). While the NSS sets laudable ambitions for the sector, there was some concern that it was lacking in detail and specific actions. We are pleased to see that the NSS is now being complemented by a series of further action plans, including the Space Industrial Plan and the expected Space Workforce



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Action Plan. It is critical that this momentum toward action is maintained after the General Election, and that plans are accompanied by robust evaluation to demonstrate that actions are having the intended impact. In particular, the skills challenges facing the space sector are such that no delay can be afforded in publishing the Space Workforce Action Plan, regardless of the outcome of the election.

Despite the hugely exciting progress we have seen across Scotland's space sector, we are concerned that there may be limited public awareness (both in the UK and internationally) of the sector's success and potential. It is critically important to raise the profile of Scotland's space sector. This will be necessary, not just to attract the domestic and foreign investment that the sector needs to grow, but also to secure public buy-in for government support to the sector. We believe that the UK and Scottish Governments need to reinforce two messages in particular. First, space must not be seen as a discrete sector narrowly defined by rockets and astronauts, but as an environment with relevance to every aspect of our daily lives. We have heard about the potential for space to transform the delivery of public services. The UK and Scottish Governments must be clear that space capability is key to future growth, sustainability and wellbeing. Second, it is vital for the public to understand that failure in the space sector need not be a bad thing. The Civil Aviation Authority told us that, for new operators entering the market since 2000, the failure rate of first launches by new operators is around 90%. While the failure of the Virgin Orbit launch from Cornwall to achieve orbit was obviously disappointing, the sector learns from such failures, and they are part of the journey toward success in future. The UK Space Agency should set out how it intends to develop public understanding of this fact, particularly as Scotland draws ever closer to achieving launch capability.

Launch

Scotland's launch sector is at a particularly exciting moment. We took oral evidence from both SaxaVord Spaceport and Orbex (which is developing the Sutherland site), and visited SaxaVord on Unst, Shetland in March 2024. We are aware that several operators are planning launches from SaxaVord in the coming months and years, and within the last two weeks, Rocket Factory Augsburg has undertaken its first hot fire tests at the site. We welcome the UK Government's support for the launch sector, including the £10 million announced for SaxaVord in the Spring Budget, but we would urge the UK Government to set out clearly how it sees these investments forming part of a pathway toward a viable and competitive launch sector. This must also include an evaluation of the infrastructure required for spaceports to be viable. Spaceports are often necessarily located in remote areas, which may not have easy access to transport, communications, housing and other vital facilities. Orbex told us that its locations in Moray and Sutherland come with challenges which impact their ability to attract talent, and that "significant changes" in roads, housing and other infrastructure will be required if they are to avoid the need to develop other locations in future. We urge the UK and Scottish Governments to work together to ensure that future decisions on infrastructure investment take full account of the infrastructure needed to make Scottish spaceports a success story.

It has been made clear to us that, in order for Scotland's launch sector to grow into a thriving industry, it will need to evolve beyond the first headline launches (as crucial as these are). We note that DSIT and the UK Space Agency are considering what further interventions may be necessary in the launch sector. We call on the UK Government to ensure that developing a sustainable pipeline of launch customers is central to this approach. In particular, we were struck by the observation in the University of Strathclyde's submission that "development of a national, sustained space launch capability without a sustained government customer is, probably, unprecedented". The UK Space Agency should therefore commit to working with both the UK and Scottish Governments to identify early public sector customers for Scotland's launch and spaceport sector. Government becoming a customer of the Scottish launch sector would send a clear demand signal that the sector is viable, and encourage the development of a more



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diverse customer base in the coming years. We also call on the Department for Business and Trade to explain how it will work to promote international demand for Scottish launch services.

Supporting the sector to grow

The potential for the UK and Scottish Governments to become a customer of space services is not limited to the launch sector. Throughout our inquiry we heard about the potential for Scottish space services to transform the delivery of public services. Nevertheless, we also heard that it can be difficult for small and medium size enterprises to navigate government procurement processes. AstroAgency told us that not enough Scottish companies are accessing UK Government procurement opportunities, and that “the SME-driven nature of the country’s ecosystem means that it may be causing significant challenges for sectoral growth”. At the same time, we also heard that government itself is not always joined-up in assessing its need for space services such as Earth Observation data, and our discussions with space data companies in the United States included encouraging suggestions of the potential for more centralised procurement. It is clear that there is a gap in matching the right government customer to the right space service provider, and we believe that the UK Space Agency can play a greater role in closing this gap. We urge the UK Space Agency to co-ordinate demand for space services across government, identify potential UK providers of these services, and provide targeted support and guidance to both sides in navigating procurement processes. This role must be made central to delivering the UK Space Agency’s missions of maximising UK space sector growth and championing the power of space. As an example of how this could be achieved, we urge the UK Space Agency to use its new Edinburgh office in Queen Elizabeth House as a “front of house” for multiple potential UK Government customers of Scottish space services, supporting both sides to make these connections. We also call on the UK Space Agency and Scottish Government to work together in understanding and meeting the Scottish Government’s own needs for space services.

Scotland’s space sector is dominated by SMEs who often face challenges making the leap from ‘start-up’ to ‘scale-up’. We have heard concerns that Scotland’s proportion of the UK’s European Space Agency contracts remains disproportionately low given its population and the size of its sector. While we understand the complexities associated with calculating Scotland’s share as a percentage figure, we are clear that the UK Space Agency needs to keep supporting the Scottish sector to access more ESA funding. The UK Space Agency should set out its strategy for better engaging SMEs in particular with ESA processes, and how it will measure the impact of its interventions to assess whether more needs to be done. More broadly, we agree with Space Scotland that there is a need to review and improve the mechanisms by which companies are encouraged to scale-up, including ensuring that infrastructure is in place, and considering whether current mechanisms are sufficiently targeted enough for the space sector. We urge the UK Space Agency to work with the Scottish Government to conduct this review.

Skills and the space workforce

Throughout our inquiry we have heard about the challenges faced by Scottish space companies in recruiting skilled personnel, particularly as this smaller and newer sector may struggle to compete in salary terms with larger and more established industries. If the UK and Scottish Governments are to achieve their ambitions for the space workforce, targeted support for skills will be needed. As a first step, both Governments need a clear picture of what the sector needs. At the Committee’s October 2023 roundtable event in Glasgow, participants said there was a need to establish facts about the nature of the space workforce to properly identify what and where the challenges are. We encourage the UK Space Agency to work with industry and with Skills Development Scotland to carry out a mapping exercise of the specific key skills challenges facing the space sector, to inform a set of targeted interventions. One particular challenge we would highlight is around business skills such as marketing and finance, with EcoOnline’s Sarah Middlemiss telling us that there is a lack of “people who know how to scale a business”.



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While this mapping exercise is important, some broader skills challenges are already clear. The then Science and Technology Committee previously observed that space businesses can be hesitant to invest in upskilling the workforce given the fierce competition for skills, and we understand that it can be difficult to justify investment in workers who might soon move to another sector altogether. We believe that government intervention is needed to give industry the confidence to make the necessary investments in skills that will benefit the sector as a whole. ADS and UKspace told us that support programmes for upskilling are “difficult for companies to deliver at an individual level” and could therefore “benefit from coordination and local or national support”. The UK Space Agency should form a new partnership with academia and industry to deliver a package of development programmes for the space sector, including apprenticeships through colleges and universities, and CPD schemes for those already in the sector. This package should also include support for re-skilling of personnel from other industries, to help space compete with more mature sectors.

We are aware of concerns that foreign investments in the Scottish space sector have sometimes resulted in the displacement of existing jobs, rather than the creation of new ones. It is essential that foreign investment in Scotland contributes to the growth of the domestic sector. We encourage the UK Space Agency to share the results of its skills mapping exercise with Scottish Development International, so that the UK and Scottish Governments can work together to ensure alignment between skills planning and investment strategy.

Finally, we recognise that the work to develop a pipeline of skilled workers for the Scottish space sector must begin at an early age. We have heard about exciting examples of engaging children, students and young people in STEM generally and space in particular, but two key messages have emerged from our inquiry. First, there needs to be sustained engagement with young people throughout their education and early careers. One-off interactions with space and science can excite, but in order to meaningfully inspire, they must be in the context of a longer-term programme of outreach. We were encouraged by the example of Glasgow Science Centre, whose chief executive Stephen Breslin explained that “if we want to get that transformation we have to engage with young people on a sustained basis over a number of weeks, over a number of years”. Second, outreach on space must go beyond a narrow focus on rockets and astronauts as being illustrative of the space sector. The space sector overlaps with many other industries and every aspect of modern life. The Space Skills Alliance’s Joseph Dudley told us that “there is no shortage of applicants to become an astronaut; there are huge shortages of applicants for pretty much every other role in the sector”. To inspire as many young people as possible into space, government, academia and industry must work together to communicate the full range of careers that are possible. This will be particularly critical for improving the diversity of the space workforce. To unlock the Scottish space sector’s full potential, it is imperative that no group feels that space is inherently ‘not for them’. We urge the UK Space Agency to set out how it will ensure that its space outreach activities achieve sustained engagement with young people that communicates the full range of possibilities in the space sector.

I would like to reiterate that the Committee sees enormous potential in the Scottish space sector. Regardless of the outcome of the General Election, I hope that this summary of our findings will be helpful to the UK Government in considering how it can support and nurture this critical and exciting industry.

This letter will be published on our website. Our successor Committee may wish to publish any response.

Yours sincerely



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Pete Wishart MP
Chair, Scottish Affairs Committee