



The UK Space Agency

NASA is perhaps the most well-known and largest **space agency** in the western world but is funded by Americans and roots for American expansion into space. What about the UK space agency? How does the UK invest in space? Does the UK have a future as a space economy?

The UK Space Agency (UKSA) is government-owned and funded by the taxpayers of the country as well as private interest. At the time of writing, it lies under the Ministry of Business, Energy and Industrial Strategy. UKSA is a relatively new agency that was announced back in 2009 by the then Minister for Science and Innovation, Lord Drayson. Huge investment went into a headquarters in Wiltshire and most space-related organisations and jobs merged into one as UKSA. This worked to replace the former British National Space Centre (BNSC) and the original British **Space Programme**, which was born as a result of the Cold War in 1952.

One of the most important roles for UKSA is maintaining the relationship between UK space programmes and research and those that are European, which take place under the European Space Agency (ESA). Following Brexit, the UK has continued to play an active role in ESA as it has done since 1978. It also continues to contribute financially, currently around £ 375 million per year.

The UK government is responsible for setting out the national space strategy. Primarily, it aims to grow and level up the UK **space economy** to make it “one of the most innovative and attractive space economies in the world”. It aims to lead **scientific discovery**, protect and define national interest through space and use space to deliver for UK citizens.

The UK space industry is worth around £ 16 billion and employs just over 45,000 workers. One of the most important parts of the UK space economy is the manufacturing of **satellites**, which allow **weather forecasting**, **navigation systems** and television services amongst many other things. Satellites alone underpin around £ 360 billion per year in UK economic activity and is the second-largest producer after the USA. It currently represents 6% of the global space market with hopes to increase to around 10% in the coming years. As a result, funding has steadily been increasing for the space sector in the UK, however it still lies significantly below many other leading space economies in the world.

The UK does have a history with space and a few milestones have been achieved along the way. Of course, British satellites have been launched into space. The UK also created and launched its own **space rocket**, Black Arrow, which successfully launched a British satellite into space. Despite its success, the programme was closed down and the remaining unused rocket is now on display at the Science Museum in London.

In 2003, the Bigl-2 landed on Mars to explore the planet. Shortly after entering the **atmosphere** in Mars, contact was lost but images from other space agencies show it did indeed land on the planet and remains there.

The UK has a fair few **astronauts** too. Our first astronaut, Helen Sharman, from the north of England travelled on the Soyuz rocket with Soviet astronauts in 1991. Not only was she the first British astronaut but the first female European astronaut too. A few astronauts followed but the first to visit the **International Space Station** was Tim Peake, who now tours the UK showcasing what he learnt from his time in space.

Private interest in space from the UK has also attracted much attention. Virgin Galactic, founded by British billionaire Richard Branson, most recently had a successful trip to space as “**space tourists**” on the VSS Unity spaceship. Orbex Space is another private space company that creates rockets for **launching** smallsats into space and there’s Skyrora, which creates environmentally-friendly rocket fuel and is working on how to clean up **space debris**.

More recently, announcements have been made that **spaceports** up and down the country are now commissioned and ready to launch new rockets with the government focusing on making the UK a hub for space launches in Europe. This service is predicted to bring in around £3.8 billion to the UK economy over the next 10 years and experts believe the entire British space market could reach a value of just over £1 trillion in the coming years.

The first big launch will be the Virgin Orbit Cosmic Girl. A Boeing 747 will leave Spaceport Cornwall, fly out over the sea then the LauncherOne rocket will launch from the wing. However, spaceports in Sutherland and Shetland are expected to soon be commissioned for launches from other private British space companies.

All in all, the UK has a relatively short and under-funded relationship with space in comparison to other large economies in the world. However, with new legislation that supports government funding of space, new **launchpads** at sites across the UK and huge private interest from billionaires in the country, the UK could very well be one of the most competitive space economies in the future.

Resources

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1034313/national-space-strategy.pdf
- <https://orbitaltoday.com/2021/12/10/the-most-important-milestones-in-the-british-space-history-the-future-potential/>