

## £1.2 million fund will help UK make space safer

One of the biggest challenges facing the space sector is orbital congestion and space debris. There are currently around 3,000 working satellites in orbit, and an estimated 130 million other pieces of debris, including old satellites, spent rocket bodies and even tools dropped by astronauts.

One collision could create thousands of small, fast-moving fragments, damaging the satellites that provide everyday services such as communications, weather forecasting or satellite navigation. This funding will help bolster the UK's capabilities to track, monitor and reduce the risks of potentially dangerous encounters with satellites or even the crewed International Space Station.

Space debris is a global problem and the joint initiative announced today from the UK Space Agency's National Space Technology Programme (NSTP) and Space, Surveillance and Tracking Programme (SST) will enable UK companies to mature technologies and early phase concepts to help tackle the issue.

Projects should reduce the risks of dangerous collisions in space by monitoring, tracking or supporting the removal of potentially hazardous objects.

Proposals could include ideas to:

- advance our capabilities to detect, track or identify objects in orbit
- improve current approaches to compiling, cleaning or analysing data created by SST sensors
- improve algorithms used to determine objects' orbits, allowing us to predict conjunctions, fragmenting or re-entering
- develop new technologies needed to conduct the removal of debris from orbit. This includes improving or developing new systems to help capture, manipulate, manoeuvre or de-orbit debris using another spacecraft.

The deadline for applications is midday on 25 August 2021 and organisations can bid for up to £200,000.

Graham Turnock, Chief Executive of the UK Space Agency, said:

Tracking satellites and reducing space debris will safeguard the services we all use every day to communicate with loved ones, access online banking, and study our ever-changing planet.

This funding will help grow our world-class space sector and provide pioneering minds with the resources they need to position the UK a global leader in Space Surveillance and Tracking.

New figures released by the UK Space Agency this month show strong growth in the UK space sector. Income rose from £14.8 billion in 2016/17 to £16.4 billion in 2018/19, representing a growth of 5.7 per cent in real terms, while employment rose by 3,200 from 41,900 to 45,100. Research and development spending rose 18 per cent in real terms from £595 million in 2016/17 to £702 million in 2018/19.