UK Space Agency to co-host Summit for Space Sustainability

The UK Space Agency will co-host a global summit to agree new ways of ensuring a safe, sustainable and secure space environment, including tackling space debris which threatens the satellites we rely on in our daily lives.

The 4th Summit for Space Sustainability, hosted with the Secure World Foundation in London on the 22 and 23 June, brings together government, industry and academics from around the world to discuss how to ensure the sustainability of space operations.

Orbital congestion created by space debris is one of the biggest global challenges facing the space sector. There are currently around 30,000 pieces of debris in orbit large enough to be tracked from Earth such as old satellites, spent rocket bodies and even tools dropped by astronauts. But there are also an estimated 130 million pieces of smaller debris.

Space debris can stay in orbit for hundreds of years and present a real danger to the rapidly increasing number of new satellites being launched each year which provide vital services, including communications and climate change monitoring.

Science Minister George Freeman said:

As our reliance on satellites for everyday activity grows and the UK becomes a hub of small satellite design, manufacturing and launch, we are at the forefront of ensuring a safe and secure space environment.

With more than a thousand satellites launched last year alone, "safe space" means proper governance of space traffic, debris removal, satellite tracking and in-orbit servicing

I recently visited the Harwell Space Campus with HRH The Prince of Wales to discuss space sustainability, and the UK Space Agency is working with innovative companies including Astroscale, ClearSpace and SSTL to develop a new national mission to clean up space junk.

We are now taking the lead internationally by bringing together experts from around the world to this Summit for Space Sustainability.

Previous speakers at the Summit for Space Sustainability, include the former NASA Administrator Jim Bridenstine; Dan Hart, President and CEO of Virgin Orbit; Thelma Krug, Vice-Chair of the Intergovernmental Panel on Climate Change; and Pam Melroy, now the Deputy Administrator of NASA.

Dr Peter Martinez, Executive Director of the Secure World Foundation, a leading US non-profit organisation focused on the sustainable use of space, said:

The existing international governance system for space activities was developed at a time when there were only a few space actors, and the pace of development was slow. Today, we have a much greater number and diversity of actors, and new types of space activities that are raising challenges for the long-term sustainability of space activities.

The Summit will bring together leaders from government, industry, and civil society to discuss practical solutions to these challenges and to enhance the safety and sustainability of space activities. We are particularly pleased to partner with the UK Space Agency to co-host the 4th Summit for Space Sustainability in the UK because of the UK's determination and ongoing efforts to play a leading role in international efforts to promote space sustainability.

The UK's <u>National Space Strategy</u> set out a bold vision for the sector and recognises the need for the UK to lead in making space safe and sustainable. The new funding supports the development of underlying technology or data processing capabilities for space surveillance and tracking to support the removal of orbital debris.

In the past two years the UK Space Agency has provided £3.7 million for UK industry and academia to develop new technology for Space Surveillance and Tracking (SST) and debris removal, as well as investing around £16 million on space sustainability through the European Space Agency in 2019. The UK is the largest contributor to ESA's Space Safety Programme.

In 2021 the UK Space Agency worked with the UN Office for Outer Space Affairs (UN00SA) to support the next stage of international efforts to promote space sustainability and provided funding to research a UK-led mission to remove junk from space.

In January the UK Space Agency announced $\underline{\texttt{f1.7}}$ million for 13 new projects to help track and remove dangerous debris in space. They included an AI-based tool which can take autonomous action to avoid a collision and another which will see multiple small spacecraft fired at debris before taking it into the atmosphere to dispose of it.