# **UK SPACE SECTOR**



CRITICAL TO UK ECONOMY AND SECURITY

of UK GDP

(£454 million)

reliant on satellite services.

Space is a Critical National Infrastructure sector.





**UK SPACE INDUSTRY** 

**Organisations** 

People employed

• First licensed vertical launch spaceport in Europe, with

• UK company Orbex pre-selected for ESA's European Launcher Challenge.

• Procurement underway with up to £75.6 million for the

UK's first mission to remove defunct satellites from orbit.

• First UK satellite launched from Space Forge for

• First full year of operations for the National Space

Operations Centre, provided around **30,000 collision** alerts to over 90% of UK-licensed satellite operators, and

• UK industry designing and building ESA's Vigil space

Income generated

launches expected in 2025/26

in-space manufacturing.

Space resilience

In-orbit Servicing Assembly

and Manufacturing (ISAM)

Launch

#### A GLOBAL OPPORTUNITY

The UK #1 in Europe for private investment (2014-2024),

spending 1% of global civil

space funding for 5% of the market.

#### UK SPACE AGENCY IMPACT

**Catalysed** 

in investment and revenue for the UK space sector in 2024/25.

in direct economic return for every £1 of UK investment in the European Space Agency.

**Delivered** 

participant hours across 35 funded education and future workforce projects.



### **UK SPACE AGENCY ACTIVITY**

#### Space science

- More than 20 missions to put **UK science** at the heart of global action to better understand our Universe, from NASA's James Webb Space Telescope to ESA's Ariel spacecraft, which will help the search for life beyond Earth.
- UK ranked #2 globally within the top 10% of most cited publications in astronomy and space science.

#### **Exploration**

- **Dr Rosemary Coogan** completed astronaut basic training and is certified for spaceflight assignments. Astronaut reserves **John McFall** and **Dr Meganne** Christian undergoing training.
- First successful commercial lunar landing by FireFly powered by **UK engine** developed by Nammo.
- Mars Rover built by Airbus in the UK on track for launch in 2028

#### International partnerships

• 30 projects supported through the International Bilateral Fund, with nations including Australia, Canada, Japan, South Korea and the US.

#### **European Space Agency**

- Major improvement in the UK's geo-return, securing additional contracts of €134 million for UK industry.
- Secured £7.49 in direct economic return for every £1 of UK investment in the European Space Agency.

#### Position, navigation and timing (PNT)

• First open competition to develop a government time transfer capability across UK strategic locations.

#### Earth Observation

- **UK leadership** on the science and industry contributions to ESA's Biomass mission, the first P-band radar to map the world's forests.
- First dedicated European carbon dioxide monitoring satellite (MicroCarb) launched, thanks to **UK-France** partnership.
- UK EO data hub to improve access and ease of use for a wide range of organisations that can benefit from satellite observations

#### <u>Telecommunications</u>

- Up to £160 million available for Connectivity in low Earth Órbit.
  - First dedicated direct-to device mobile network in the UK with Viasat under development.
- UK-built Lunar Pathfinder communications and navigation satellite set to launch to the Moon in 2026.

#### Innovation, investment and commercialisation

- 108 projects (since 2020) delivered through the National Space Innovation Programme, boosting bold
  - Space Clusters Infrastructure Fund projected to catalyse £700 million of private investment.
    - First space investments made through the UKI2S fund.

#### Space sustainability

- First Space Sustainability Standards published by
- UK Chair of the Inter-Agency Space Debris Coordination Committee

## Skills and future workforce

monitoring 870 uncontrolled re-entries.

weather mission, supporting 150 jobs.

• Five new training courses, with **4,500 people** receiving continuing professional development.