# Press release: New space contracts for UK companies as Sentinel satellite lifts off

The Sentinel-3B satellite, which features systems built in the UK, will join six other satellites monitoring and measuring the Earth's environment from space.

The majority of information they collect is freely available to anyone in the world so it can be used for anything from agriculture to urban planning, as well as tackling global issues like climate change.

Ahead of the satellite's launch from Russia's Plesetsk Cosmodrome due just before 7pm today (25 April), the European Space Agency announced the UK has secured a number of contracts for future work in the Copernicus programme.

Between Airbus UK and Thales Alenia Space, the UK has secured more than €12 million worth of contracts, including important work on two missions, Land Surface Temperature and the Polar Microwave Imaging.

Sam Gyimah, Science Minister, said:

"The UK space sector is a success story and our capabilities in Earth observation satellite technology are second to none. These latest contracts confirm the vital role of British research, innovation and industry to Copernicus.

"We've been clear that we want our companies and universities to continue participating in key EU space programmes, as long as they can take part on a fair and open basis. Our leading role in the European Space Agency will not change as we leave the EU, and this Government will ensure the UK thrives in the commercial space age through our modern Industrial Strategy."

The UK is also involved in three other missions; the L-band SAR mission, which measures soil moisture and crops for food security and precision farming, the Polar Ice and Snow Topographic Mission and the Anthropogenic CO2 Monitoring Mission.

George Eustice, Agricultural Minister, said:

"I am delighted about today's launch of Sentinel-3B, which will further increase the ability of Copernicus to monitor changes in sea level, marine pollution, and biological productivity. This closely follows the launch of the British-built Sentinel-5P in October, and reflects the growing success of the programme as the world's leading Earth Observation satellite system.

"The UK has one of the largest concentrations of Copernicus data users in Europe. The satellite data is increasingly used by the UK Government, especially the Department for Environment, Food and Rural Affairs, to monitor

water and air quality, support flood recovery efforts, and deliver farming support, for example. It could also prove to be an immensely valuable tool in the delivery of our 25 year Environment Plan – a strategic priority for the UK Government.

“As the programme looks to the future, it is great to see UK companies and users successfully driving the development of Copernicus as it continues to grow in importance.”

Sentinel-3B is the seventh satellite in the Copernicus programme and features several instruments, measuring colour and surface temperature over the land and ocean. It will measure the temperature, colour and height of the sea surface as well as the thickness of sea ice. These measurements are used to monitor changes in sea level, marine pollution and biological productivity.

Ben Olivier, CEO of Thales Alenia Space in the UK, said:

“The importance of the Copernicus missions in securing our ability to understand and help manage the impacts of the climate on our environment, economy and sustainable development cannot be over-stated.

“Thales Alenia Space in the UK is pleased to have secured the lead role in the next expansion mission such as CO2 monitoring. This reflects the engineering and scientific skills that the UK contributes to collective progress and security.”

Over land, this innovative mission provides information to monitor wildfires, map the way land is used, observe vegetation state and measure the height of rivers and lakes – complementing the high-resolution measurements of its Sentinel-2 sister mission.

The satellite features systems built in the UK, including the battery and propulsion system, and draws on UK scientific expertise and experience in helping to calibrate and analyse the data obtained.

Completing the constellation of the first set of Sentinel missions, it follows the launch of Sentinel-5P in October 2017, which was built by Airbus UK, and features state of the art sensors from Teledyne E2V in Chelmsford at the core of the Dutch-built TROPOMI instrument.

Andy Stroomer, UK Business Development Director for space at Airbus, said:

“The Copernicus programme provides a hugely important contribution towards global monitoring of the environment. Airbus in the UK has been a major player in the development of satellites, ground systems and services supporting Copernicus. Contributions include: leadership of the Sentinel-5P atmospheric chemistry mission; the cornerstone radar instrument electronics for Sentinel 1; and cryogenic coolers underpinning the performance of this Sentinel 3 mission. We look forward to continuing to play key roles in future Copernicus missions.”

In orbit Sentinel-3B will join its twin, Sentinel-3A, which was launched in 2016. This pairing of satellites provides the best coverage and data delivery

for Copernicus. The two Sentinel-1 radar satellites and two Sentinel-2 optical satellites operate in a similar way. Sentinel-5P is unique in the Copernicus constellation in that it is a single-satellite mission, but its extremely wide swath covers Earth every 24 hours.