

Sentinel-5 precursor satellite ready for launch

July 21 2017



A UK-built satellite which will be part of Europe's world-leading environmental monitoring programme – Copernicus – is ready for launch.

Sentinel-5 Precursor, part of a joint European Commission–ESA undertaking which aims to supply geo-information products and services based on the use of data from space, is set to leave Airbus's site in Stevenage.

The satellite will provide essential atmospheric chemistry data to the Copernicus programme before the Sentinel-5 instrument becomes operational in 2021 on the MetOp Second Generation satellite.

Business Secretary Greg Clark said:

"The UK-built Sentinel-5 Precursor satellite and the success of the Copernicus Programme demonstrates what we can achieve through collaboration with our European partners and the UK's vital role in the programme thanks to our earth observation expertise.

We've been clear that we want our companies and universities to continue participating in key EU space programmes, and through our Industrial Strategy and ongoing investment in the UK space sector, we are ensuring we have the infrastructure and skills in place to support our ambition to capture 10% of the global space market by 2030."

Data from the Sentinel satellites benefits the UK public sector in areas such as emergency response or flooding; farming and environmental management; air quality; marine planning and fisheries. The same data also enables commercial applications that help our wider economy function more efficiently and effectively, growing our space sector at the same time.

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

"The whole of the Copernicus programme is a fantastic success for the UK. It has a global vision, providing near real-time measurements of Earth on an unprecedented scale.

Copernicus has been a major work programme for UK space technology companies, building and testing instruments and satellites. This industrial contribution helps us maintain and expand UK skills and capability, but also strengthens the whole programme, as ESA can rely on UK expertise to make sure these 'state of the art' spacecraft have the best and brightest of Europe's [space](#) sector behind them."

Sentinel-5 Precursor features the TROPOMI (TROPOspheric Monitoring Instrument) instrument, developed by Airbus DS Netherlands for the European Space Agency (ESA) and the Netherlands Space Office. TROPOMI will measure ozone, nitrogen dioxide, sulphur dioxide, methane and other atmospheric pollutants at a higher resolution than previous instruments. Having more accurate atmospheric data will enable improved climate models and pollutant tracking and forecasting.

Colin Paynter, Managing Director of Airbus Defence and Space in the UK, said:

"For Sentinel-5 Precursor we used the commercially successful AstroBus platform, enabling us to meet challenging delivery and cost efficiency targets. This mission will give Europe a new way to measure global pollution levels in much greater detail."

Sentinel-5 Precursor is due for launch on a Rokot rocket from Plesetsk Cosmodrome, Russia, in September 2017.

Provided by UK Space Agency

Citation: Sentinel-5 precursor satellite ready for launch (2017, July 21) retrieved 24 April 2024 from <https://phys.org/news/2017-07-sentinel-precursor-satellite-ready.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--