

Press Release

9 January 2019

SSTL completes small geostationary platform build for EUTELSAT QUANTUM

Surrey Satellite Technology Ltd (SSTL) has completed the build of the platform for EUTELSAT QUANTUM, the world's first geostationary telecommunications satellite that will be fully reconfigurable in orbit.

The EUTELSAT QUANTUM satellite is being built under a public–private partnership between the European Space Agency (ESA) and the satellite operator Eutelsat with Airbus as the prime contractor. Today the satellite platform, which has been designed and manufactured by SSTL in Guildford, was on view to invited guests at a special event to mark the handover to Airbus who will complete the satellite assembly and testing in Toulouse.

The EUTELSAT QUANTUM platform consists of a precision-engineered composite central thrust tube standing at 2.5 metres tall which houses a bipropellant chemical propulsion system that will enable the satellite to stay on station throughout its 15 year lifetime, and SSTL's newly developed GEO momentum wheels and gyro which will maintain the satellite in a stable attitude and enable adjustments in the satellite's orbital position.

Sarah Parker, Managing Director of SSTL said "The completion of our work on the EUTELSAT QUANTUM satellite platform is an important milestone for SSTL as it represents our first venture into the global commercial telecoms satellite market. The design and assembly of this innovative spacecraft has enabled us to advance the knowledge and skills required to develop highly capable satellite products for the evolving telecoms market, where we are actively engaged in seeking new opportunities."

Colin Paynter, Managing Director, Airbus Defence and Space UK, said: "Combining the payload expertise from Airbus in Portsmouth, and SSTL's new geostationary platform



provides a very sophisticated package for Eutelsat. The satellite is a world first, fully reprogrammable in orbit, and we're looking forward to seeing it fly."

The EUTELSAT QUANTUM satellite will be able to adapt to new demands in coverage, bandwidth, power and frequency, enabling it to operate effectively from any orbital slot. EUTELSAT QUANTUM will be the first generation of universal satellites able to serve any region of the world and adjust to new business without the user needing to procure and launch an entirely new satellite. Featuring phased array antennas and flexible connectivity, which is fully reconfigurable in orbit, EUTELSAT QUANTUM will be able to adjust its coverage and capacity to suit customers' needs as and when they change.

Yohann Leroy, Deputy CEO and CTO at Eutelsat said "EUTELSAT QUANTUM is a world first and the culmination of many years of research by Eutelsat. Its premium capacity will enable us to offer game-changing optionality and flexibility to our customers in the government, mobility and data markets, who will be able to operate and optimize capacity to adjust coverages in real time, and to do so autonomously. We are delighted to cooperate with our long-standing partners, the ESA, the UK Space Agency and Airbus, and to be able to rely on the world-leading expertise within the UK space industry."

EUTELSAT QUANTUM uses technology developed by Airbus and SSTL in the UK under the ESA Advanced Research in Telecommunications Systems programme (ARTES) and supported by the UK Space Agency.

Magali Vaissiere, ESA Director of Telecommunications and Integrated Applications, said: "Eutelsat Quantum is an important programme for both the UK and ESA and a typical example of the success of the ARTES public–private partnership model. Above all, our priority is our industry's health and readiness for future market challenges. Partnerships like these that improve the competitiveness, competence and business prospects of the companies we support are what we dedicate our efforts to."

Dr Graham Turnock, Chief Executive of the UK Space Agency, said: "Communications satellites like EUTELSAT QUANTUM that can be reprogrammed to adapt coverage and connectivity in orbit could until recently be considered the stuff of science fiction. Through our €480m development funding in the European Space Agency's ARTES programme, the



government's Industrial Strategy and partnering with industry leaders such as Airbus we are helping UK businesses transform science fiction into commercial advantage, resulting in jobs, growth and innovation."

ENDS

Notes to editor:

A video showing the construction of the EUTELSAT QUANTUM platform at SSTL can be viewed at https://youtu.be/dFXBgzZ3frk and is available on demand - contact Joelle Sykes.

Full size accompanying images for this press release can be downloaded at https://www.sstl.co.uk/EUTELSAT-QUANTUM-platform-delivery

In attendance at SSTL for the Eutelsat Quantum event were:

Sarah Parker, Managing Director of SSTL

David Phillips – Head of UK Programmes - Space Systems, Airbus Defence and Space Yohann Leroy, Deputy CEO and CTO of Eutelsat

Magali Vaissiere, ESA's Director of Telecommunications and Integrated Applications Catherine Mealing-Jones, Director of Growth at the UK Space Agency

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About SSTL

Surrey Satellite Technology Limited (SSTL) is the world's leading small satellite company, delivering operational space missions for a range of applications including Earth observation, science, communications, navigation, in-orbit servicing and beyond Earth infrastructure. SSTL designs, manufactures and operates high performance satellites and ground systems for a fraction of the price normally associated with space missions, and



employs 500 staff working on turnkey satellite platforms, space-proven satellite avionics, optical instruments and new mission concepts.

Since 1981, SSTL has built and launched more than 60 satellites for 20 international customers, as well as providing training and development programmes, consultancy services, and mission studies for ESA, NASA, international governments and commercial customers. Our innovative approach is changing the economics of space.

Headquartered in Guildford, UK, SSTL is part of Airbus. www.sstl.co.uk