

# Satellite Applications

## Impact Story

# Airbus

“ Airbus enjoys a continuing close relationship with Catapult with the joint objective to support the UK space sector to achieve its ambitious growth target. ”

### How has Catapult helped?



**Market analysis & business case development:** As part of the joint 'Big Ideas' project, Catapult is contributing its knowledge and connections into end-user markets to investigate opportunities and business models for high-capacity Earth observation services.



**Connected to innovators:** Catapult has linked Airbus to world leading Computer Vision groups at a renowned University to help apply cutting-edge research to satellite imagery.



**Technology development:** Catapult and Airbus have collaborated with NPL and ETL systems on a novel concept for ultra-high capacity satellite constellations in geosynchronous orbits, to support future fixed and mobile satellite communications services. The initial feasibility study has concluded that the system would be very flexible and would be scalable, offering significant advantages in terms of frequency reuse.”



**Demonstrators and visualisation:** Catapult has leveraged its experience with visualisation and big data platforms to build a flight-tracking demonstrator to support Airbus' business development activities.

### Impact

#### Initiated opportunities

for Airbus to develop industrial and commercial applications (TRL 2-5) for cutting-edge research conducted at the University of Oxford.

#### Created opportunities

for Airbus to bring new products and technologies developed by innovative SMEs into their supply chain. Oxford Space Systems' deployable structures (TRL 5-9) is one such example.

This enables Airbus to enhance its product portfolio's competitive positioning with a lesser risk and investment exposure.

Introduction to:

# AIRBUS

Airbus is a global leader in aeronautics, space and related services. In 2016, it generated revenues of €67 billion and employed a workforce of around 134,000. Airbus offers the most comprehensive range of passenger airliners from 100 to more than 600 seats. Airbus is also a European leader providing tanker, combat, transport and mission aircraft, as well as Europe's number one space enterprise and the world's second largest space business.

Airbus Defence & Space Ltd is the largest space manufacturing and services company in the UK, employing over 3,500 people working on space-related projects with a space turnover of more than £1 billion per annum. Areas of expertise and operations include Earth observation, telecommunications, navigation and scientific satellite design and manufacture, related ground systems, payload RF electronics, instruments and radar.

## Working with Airbus

Activities that Airbus and Catapult have collaborated on include service provision for the European Data Relay System (EDRS) ground segment and the Sentinel Data Access Service (SEDAS).

Catapult and UKSpace hosted a 'Supply Chain' event, where SMEs could meet one-to-one with Airbus procurement. We have also cooperated on workshops, technology development, research and product definition, and both organisations are Steering Board members of the Satellite Finance Network.



**Airbus enjoys a continuing close relationship with Catapult with the joint objective to support the UK space sector to achieve its ambitious growth target.** Our joint activities are many and varied, with Catapult able to provide numerous services: workshop facilitation, access to their facilities, consultancy support and the ability to leverage its unique characteristic of neutrality and impartiality to connect with user communities and provide an advice and brokerage service.

### Richard Peckham

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Airbus and Catapult work together on the Sentinel Data Access Service (SEDAS).

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