CORNWALL SPACE CLUSTER

Experts in Space, Aerospace & Data.

´The Home of Innovation

PRIORITIES FOR CORNWALL

SATELLITE OPERATIONS AND COMMUNICATIONS

To be the global partner of choice for satellite operations and communications.

How will we achieve it?
Goonhilly Earth Station Ltd is a leader in space communications, providing mission contact mapping and digital twin products for mission simulations and training.

Partnering with Avanti Communications, Goonhilly utilizes Avanti's global satellite network to deliver connectivity services. Together, they aim to enhance mission operations, protect communities, and expand opportunities for people, businesses, and organizations worldwide, connecting 1.7 billion people across 118 countries.

AEROSPACE AND SPACE FLIGHT SYSTEMS

To be a global leader in testing and development of aerospace and space flight systems.

How will we achieve it?
We will ensure Spaceport Cornwall is Europe's preferred horizontal launch partner and encourage R&D and collaboration for businesses looking to develop, integrate, launch and operate space systems.

Alongside this, we'll ensure that Cornwall Airport Newquay, Wholeship's Lizard Range and Land's End Airport are recognised as national centres for testing, evaluating and operating Uncrewed Aerial Systems (UAS), acting as catalysts for aerospace R&D.

DISRUPTIVE INNOVATION — A RESPONSIBLE AND SUSTAINABLE FUTURE

To be a global leader in disruptive innovation which creates a more responsible and sustainable future.

How will we achieve it?
We will overcome local and global challenges using 'Space for Good' — to shape research, inform debates and engage in global policy discussions which will promote and nurture responsible global aerospace and space activities and supply chains.

OPPORTUNITIES FOR PEOPLE, COMMUNITIES AND BUSINESSES TO GROW

Increase the value of the sector by £150m, providing opportunities for people, communities and businesses to grow.

How will we achieve it?
We will ensure the Data, Space and Aerospace sectors are more accessible to people from all backgrounds at all stages of their career, by diversifying, reskilling and upskilling the workforce where required. We will also support businesses to pivot into these high-value sectors, creating opportunities for aerospace and space professionals.

Gail Eastaugh
Head of Strategic Partnerships – Cornwall Space Cluster

A VISION FOR CORNWALL

By 2030 Cornwall will be a leader in the national space programme by exploiting the physical, digital and intellectual assets across Cornwall and Isles of Scilly. By leveraging the Data, Space and Aerospace sectors we will overcome local and global challenges such as the impact of climate change.

KEY SECTORS IN CORNWALL

Cornwall is leading some of the biggest innovations currently taking place in data, space and aerospace.

Read about some of the ground breaking technologies that businesses in Cornwall are developing for the data, space and aerospace industries. Find out why Cornwall is the home of innovation.

AEROSPACE

The aerospace industry in Cornwall is becoming a key contributor to the region's economy, blending its historical engineering expertise with modern innovation. Aerohub is a thriving centre for aerospace development, offering facilities for aircraft maintenance, engineering, and research.

The region's strategic location and investment in infrastructure, including Spaceport Cornwall, have attracted companies specializing in aerospace technology, unmanned aerial systems (UAS), and satellite communications.

DATA

The data industry in Cornwall is rapidly emerging as a key player in the UK's tech landscape, supported by an expanding digital infrastructure and a growing number of tech-focused businesses.

The region has also invested in high-speed internet and digital skills development, fostering innovation in data analytics, cybersecurity, and software development. These advancements have attracted tech companies and startups, helping to diversify Cornwall's economy and position it as a hub for digital innovation and data-driven industries.

SPACE

The space industry in Cornwall has seen significant growth in recent years, becoming a vital hub for the UK's expanding space sector. Key to this development is Spaceport Cornwall, located at Cornwall Airport Newquay, which is a horizontal launch site.

Take a look at our strategy document >

Data, Space and Aerospace — 2020 to 2030. Cornwall and the Isles of Scilly: the Home of Innovation.

UK FACILITIES IN CORNWALL

Cornwall is home to nationally significant facilities for the aerospace and space sectors which are recognised globally.

GOONHILLY EARTH STATION LTD

Cornwall boasts the world's most capable commercial satellite ground station in Goonhilly Earth Station Ltd — offering deep space communications and satellite operations.

Discover more on page 8

SPACEPORT CORNWALL

The first licenced spaceport in the UK, Spaceport Cornwall is Europe's future air and space solution. A great location for space enabled companies, aerospace R&D and related enterprises.

Discover more on page 12

THE NATIONAL DRONE HUB

With access to over 8,000km of segregated airspace over land sea from surface to 55,000 feet, National Drone Hub offers one of the largest areas in the UK capable of testing UAV's Beyond Visual Line of Sight (BLVOS).

Discover more on page 10

GOONHILLY EARTH STATION

goonhilly.org

Goonhilly Earth Station has been the pioneering home of satellite communications since 1962. Under the private management of Goonhilly Earth Station Ltd. (“Goonhilly”) since 2014, the site has been rejuvenated to provide modern, world-class satellite and space communication services, earning a reputation as the “UK’s Gateway to Space”.

Goonhilly is a proud founding member of Cornwall Space Cluster, and its HQ and namesake ground station are situated near Helston, on the Lizard peninsula. The company also has offices in Farnborough, Hampshire, and owns two US teleports — COMSAT Southbury and Santa Paula.

SATELLITE (“NEAR SPACE”) COMMUNICATIONS

Goonhilly serves as a trusted communications provider for many of the world’s major satellite operators including SES, Intelsat, Eutelsat, and Viasat. Benefitting from over 90 antennas worldwide, large-scale networks, secure infrastructure, expert 24/7 support, and an optimal geographic location, it offers a range of satellite services from low Earth orbit (LEO) to geostationary orbit (GEO), including uplink and broadcast, gateway operations, TT&C (Telemetry, Tracking & Control), carrier monitoring, LEOP (Launch & Early Operations Phase) tracking, and more.

INTERNATIONAL TELEPORTS

In 2023, Goonhilly acquired two US teleports — COMSAT Southbury and Santa Paula — providing customers on both sides of the Atlantic with access to over 120 years of combined satcom experience.

The acquisition, along with the ongoing development of a further ground station in Australia, brings Goonhilly one step closer to developing its global lunar communications network. The network will provide customers with 24/7 global coverage, regardless of the Earth’s rotation, and represents a vital asset in enabling the lunar economy of tomorrow.

LUNAR AND DEEP SPACE COMMUNICATIONS

In 2021, Goonhilly became the first private company to provide communications services for spacecraft operating beyond geostationary orbit (~36,000km). Since then, it’s provided sought-after lunar and deep space communication links for a range of international agencies and private entities including ESA, NASA, ISRO, and Intuitive Machines.

With the number of lunar and deep space missions set to soar over the next decade, a widely recognised lack of global communications capacity has the potential to create a bottleneck, preventing humankind from achieving its ambitions in space. With its unparalleled commercial experience and infrastructure, Goonhilly is pioneering a new, private model of deep space communication services, ensuring that organisations can securely and reliably connect with their distant spacecraft.

SPACE AND COMMUNICATION EXPERTISE TO SUPPORT YOUR MISSION

In addition to offering near and deep space communication services, Goonhilly also brings together different technologies and technical disciplines to offer a holistic and cost-effective range of other space communication solutions.

The company’s consultant engineers and analysts provide R&D expertise for projects at a range of TRLs.

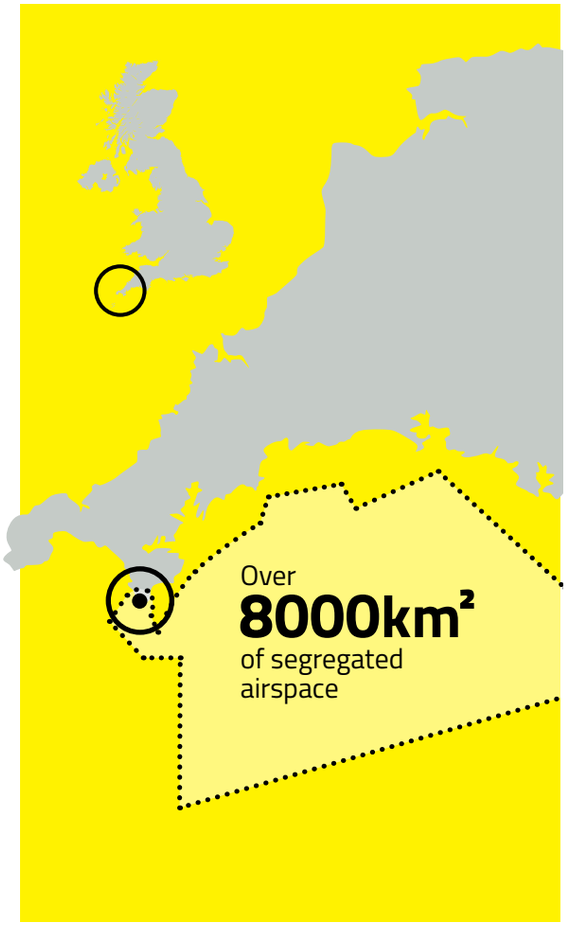
Further services offered by Goonhilly include professional training (development and delivery), supercomputing and data services, education and outreach, and specialist design and manufacturing.

NATIONAL DRONE HUB

wholeship.co.uk/
national-drone-hub

The National Drone Hub in Cornwall stands as a pioneering facility dedicated to advancing UAV technology and operations. Situated on a sprawling 320 hectare site, just 600 metres from the sea, with four runways and multiple operating surfaces, the hub offers an ideal environment for both fixed and rotary wing drone operations.

The National Drone Hub is delivered by Wholeship, in partnership with the Royal Navy at RNAS Culdrose, and in collaboration with the Cornwall Space Cluster.



SEGREGATED AIRSPACE FOR BVLOS OPERATIONS

With access to segregated airspace, the National Drone Hub is the perfect location for testing Beyond Visual Line of Sight (BVLOS) operations, as required by the Civil Aviation Authority (CAA). This unique feature sets the National Drone Hub apart as a premier testing facility for cutting edge drone technologies and operational strategies.

STATE-OF-THE-ART-FACILITIES

The National Drone Hub's facility provides a range of amenities tailored to the needs of UAV operators and stakeholders. From hangarage to office and accommodation facilities, the Drone Hub will ensure a seamless and efficient operational experience for their customers.

COLLABORATION FOR INNOVATION

The National Drone Hub collaborates closely with the Cornwall Space Cluster to drive innovation and development in UAV technology. Both are committed to supporting the growth of UAV technology to connect rural communities, enhance healthcare services with cutting-edge solutions, and create new, highly skilled jobs in Cornwall and the wider South West of England.

SPACEPORT CORNWALL

spaceportcornwall.com

Spaceport Cornwall is Europe's future air and space solution. We provide flexible, low cost, resilient and safe access to space and support aerospace innovation.

The horizontal launch site is working with future operators including Sierra Space and Space Engine Systems who are developing innovative horizontal launch systems and are looking to use the spaceport for system development and UK return missions.

Spaceport Cornwall is in discussions with an established US horizontal launch provider regarding the provision of launch services from the UK and hope to announce an agreement in early 2024 to support launches from mid-2025.

SPACEPORT CORNWALL IS EUROPE'S FUTURE AIR AND SPACE SOLUTION

MULTI-USER OPERATIONS

One of the longest runways in the UK, uncongested airspace, and direct access to the sea creates a world class operational environment for orbital, sub-orbital, micro-gravity and experimental future flight technologies.

CONNECTED

With daily flights to London, Manchester and other major UK and European cities, great road access, and Superfast Broadband as standard, Spaceport Cornwall is a modern launch location that makes doing business easy.

YEAR-ROUND BUSINESS LOCATION

A location for space enabled companies, aerospace R&D and related enterprise

STATE OF THE ART INFRASTRUCTURE

- **The first licenced spaceport in the UK and the only operational spaceport in Western Europe**
- **Centre for Space Technologies**
- **Payload Assembly, Integration, Testing**
- **Mission Operations Rocket testing**
- **R&D zone – Full Time or Pay-As-You-Go**
- **Collaboration workspace**
- **Linking industry and academia**

CORNWALL SPACE CLUSTER

The Cornwall Space Cluster is a regional and national group of businesses and industry experts working in manufacturing, launch services, future flight testing, satellite tracking, Earth observation, remote sensing, and data applications.

The group also comprises of academics, policy-makers, local government and public sector funders who include the Department for Business and Trade, the Satellite Applications Catapult, Cornwall Council and Innovate UK.

Cornwall Space Cluster shines a spotlight on Cornwall's businesses, world-beating assets and infrastructure, including: Ground station services and satellite operations from Goonhilly Earth Station Ltd and Avanti Communications; future air and space solutions at Spaceport Cornwall; and Lizard Range flight testing. Plus businesses across several industries who use satellite data to track pollution, rising seas, deforestation and over population in Cornwall and across the globe.

This far-reaching group of experts serve an international client base and all have Cornwall's best interests at the heart of what they do — working together to create a world-beating space industry, yet one that is fairer, more inclusive and greener.

WHAT WE OFFER

We offer bid writing, business development and promotions and events to help you secure contracts, grow your business, overcome barriers to entry, excel at events, attract talent, and connect with key stakeholders across various sectors.

See page 16 for more information

STEERING GROUP

Members of the Cornwall Space Cluster Steering Group are academics, business leaders, local government and public sector funders who include the Department of Business & Trade, the Satellite Applications Catapult, Cornwall Council and Innovate UK.

The Steering group is a dedicated group of experts — chosen for their passion and expertise in the space, aerospace and data industries. An integral part of the Cornwall Space Cluster, the Steering Group has been formed to ensure that Cornwall's space ambitions are aligned with Cornwall's data and space strategy — their job is to keep up the momentum so we can work together to deliver these strategic objectives.

Discover who is in the steering group online >

DATA, SPACE AND AEROSPACE ORGANISATIONS

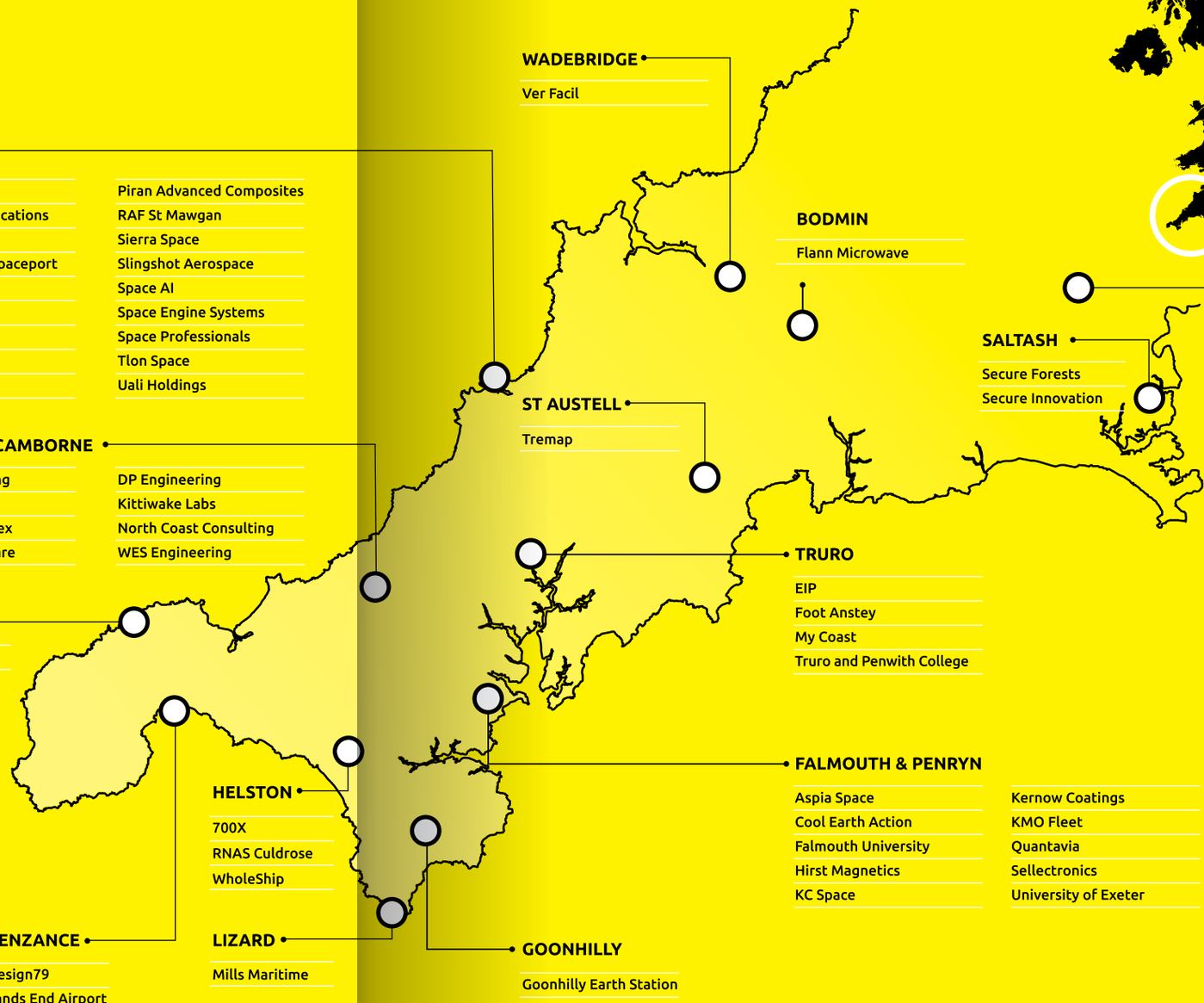
CORNWALL SPACE CLUSTER

VALUE OF SPACE DATA & AEROSPACE IN CORNWALL

£116m
TOTAL GVA

47%
GROWTH SINCE 2018

477
NUMBER OF BUSINESSES



WADEBRIDGE
- Ver Facil

NEWQUAY
- Aerohub
- Avanti Communications
- Blue Abyss
- Cornwall Air & Spaceport
- Drone Prep
- ESL Group
- Halo PR
- Intelligent AI
- Looking Beyond
- Piran Advanced Composites
- RAF St Mawgan
- Sierra Space
- Slingshot Aerospace
- Space AI
- Space Engine Systems
- Space Professionals
- Tlon Space
- Uali Holdings

BODMIN
- Flann Microwave

CALLINGTON
- Connected Economics

SALTASH
- Secure Forests
- Secure Innovation

ST AUSTELL
- Tremap

REDRUTH & CAMBORNE
- Carrak Consulting
- Tech Cornwall
- Space Flight Index
- Bluefruit Software
- DP Engineering
- Kittiwake Labs
- North Coast Consulting
- WES Engineering

TRURO
- EIP
- Foot Anstey
- My Coast
- Truro and Penwith College

ST IVES
- Mayes Creative

FALMOUTH & PENRYN
- Aspia Space
- Cool Earth Action
- Falmouth University
- Hirst Magnetics
- KC Space
- Kernow Coatings
- KMO Fleet
- Quantavia
- Sellectronics
- University of Exeter

HELSTON
- 700X
- RNAS Culdrose
- WholeShip

PENZANCE
- Design79
- Lands End Airport

LIZARD
- Mills Maritime

GOONHILLY
- Goonhilly Earth Station

JOIN OUR CLUSTER

What Cornwall Space Cluster can do for you

BID WRITING

Need support writing the bid for your project or infrastructure? Looking for help with that business case for private or venture capital investments? Want to collaborate with other tech clusters? Our experience in this area will ensure that you write a compelling bid.

BUSINESS DEVELOPMENT

Want to pivot into the space and aerospace sectors? With extensive knowledge of a wide range of sectors, and a huge list of contacts, we can help you secure contracts from adjacent sectors and find the people you need to successfully grow your business and ideas. We remove the barriers to entry and offer support to connect with customers, investors, collaborators and partners.

PROMOTION & EVENTS

We have a dedicated team working on promoting your capabilities to national and international audiences. We can create case studies and collateral to promote your business and our events stands always steal the show - join the Cornwall Space Cluster at events in Cornwall, across the UK and around the world.

The business support provided by the Cornwall Space Cluster is part-funded by the UK Space Agency and the UK Government through the UK Shared Prosperity Fund.

Cornwall Council has been chosen by Government as a Lead Authority for the fund and is responsible for monitoring the progress of projects funded through the UK Shared Prosperity Fund in Cornwall and the Isles of Scilly.

Funded by UK Government
UK SPACE AGENCY
GOOD GROWTH CORNWALL & ISLES OF SCILLY SHARED PROSPERITY FUND
CORNWALL COUNCIL
Council of the ISLES OF SCILLY

WHY CORNWALL?

Discover why businesses choose Cornwall every time

INVEST IN CORNWALL'S THRIVING SPACE CLUSTER

Thanks to a red carpet roll out and funding opportunities, space and data businesses are expanding into Cornwall to set up their operations and head offices.

UTILISE THE POWER OF SPACE DATA IN CORNWALL

Gain market advantage and business insights using satellite data launched, tracked, and downlinked in Cornwall. Grasp this opportunity to explore the possibilities of space derived data, to find new cross-sector applications and market opportunities.

KNOWLEDGE BASE

Collaboration with universities and knowledge providers supports cutting-edge projects in aviation technology, sustainability, and space exploration, helping Cornwall carve out a niche in the UK's aerospace and space sectors.

The region's emphasis on space-related research and fostering partnerships between local universities and tech companies also contributes to the UK's ambition of capturing a larger share of the global space economy.

WE HAVE THE SPACES YOUR BUSINESS NEEDS

Enjoy high-quality office, industrial and commercial development plots.

Workspaces are available to rent across Cornwall.

Businesses benefit from some of the lowest operating costs in the UK.

Cornwall Council Investment Portfolio of £600million for infrastructure projects.

LOCAL GOVERNMENT

We work with 35 local and national government agencies to deliver business solutions, opportunities and connections within the space, aerospace and data sectors for companies both in and looking to locate to Cornwall and the Isles of Scilly.

CORNWALL'S ENTERPRISE ZONES

Goonhilly's Enterprise Zone status is unique in the Space industry and makes the Earth Station one of the best places in Europe to grow your space business freely and without restrictions.

Your business can benefit from access to space communications, data storage and processing, well-equipped labs, ample office and workshop space and zero business rates.

Located at Cornwall Airport Newquay, **Aerohub's Enterprise Zone's** goal is incubating space start-ups and SMEs, attracting investment, and facilitating collaborative projects. It is also home to the Aerohub Business Park development. Open to businesses from all sectors, 53.5 acres are now build-ready.

WHY CORNWALL?

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SPACE DATA IN CORNWALL

Goonhilly Earth Station offers a range of satellite services to companies worldwide and acts as a catalyst for multi-sector growth through space derived data and digital applications. Goonhilly's capabilities include Near Space, Deep Space and Edge of Space data processing with AI. Goonhilly Earth Station's AI and DL suite will help accelerate businesses who require fast, secure and local access to EO.

CORNWALL IS WELL CONNECTED

95% Fibre broadband availability

Goonhilly Earth Station has 10Gb fibre links direct to data centres in London as well as landing locations for international subsea cables.

Cornwall Airport Newquay and Spaceport Cornwall has state-of-the-art infrastructure, one of the UK's longest runways, uncongested airspace, direct maritime access and an unparalleled aviation environment.

Also 2 flights a day to Cornwall from London Heathrow as well as a number of direct routes to domestic and European destinations.

LEADING SPACE RESEARCH, TRAINING AND SATELLITE APPLICATIONS

Cornwall is home to several globally recognized training and research centres. The South West Centre of Excellence, the regional hub of the Satellite Applications Catapult, supports businesses using satellite applications. Their role is to help organisations make use of and benefit from satellite technologies and bring together multi-disciplinary teams to generate ideas and solutions in an open innovation environment.

SOUTH WEST SPACE PARTNERSHIP

250+

Space organisations

£2.6BN

Aerospace & advanced engineering sector worth

34%

income growth since 2018/2019

THE SOUTH WEST OF ENGLAND IS HOME TO THE THIRD LARGEST CONCENTRATION OF SPACE ORGANISATIONS IN THE UK WITH OVER 250 SPACE ORGANISATIONS.

Our diverse space sector is complemented by exceptional aerospace, cyber and advanced engineering capabilities, as well as a vibrant and highly innovative digital and high-tech sector.

CORNWALL SPACE CLUSTER

cornwallspacecluster.co.uk

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