

The future role of academia in the space sector:

Collaboration

Dr Eddie Ross, Knowledge Exchange Manager,
Regional Growth Team

We work with
Innovate UK



CATAPULT
Satellite Applications



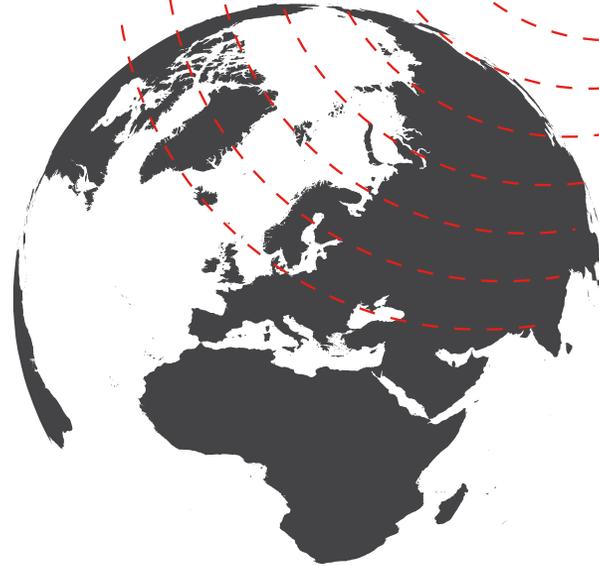
SATELLITE APPLICATIONS CATAPULT

Our Mission

// To innovate for a better world, empowered by satellites.

SATELLITE APPLICATIONS CATAPULT

Who are we?



An innovation and technology company transforming the way the world uses satellite technology and data.



WE HELP ORGANISATIONS GROW THEIR BUSINESS

We help organisations to use satellite applications to grow their business in the UK and internationally.



WE ARE INDEPENDENT

We bring together industry, researchers, end-users and government to explore and develop new ideas.



WE ARE GOVERNMENT BACKED

We are partly-funded by the Government and work closely with Innovate UK, UK Space Agency, UK Science & Innovation Network, and other public bodies.

SATELLITE APPLICATIONS CATAPULT

Our focus



UBIQUITOUS CONNECTIVITY

Super-fast, always on connectivity for the digital age



GEOSPATIAL INTELLIGENCE

An ever growing demand for information that is accurate, personalised, localised and available globally in real-time



ACCESS TO SPACE

Removing the barriers to space to grow UK launch and manufacturing expertise

APPLICATIONS

INTEGRATION FOR A CONNECTED AND INFORMATION CENTRIC WORLD



Our Facility

Satellite Applications Catapult

FACILITIES

“We offer unique state-of-the-art and professional facilities designed specifically to help grow the space sector.”



OPERATIONS CENTRE



COMMS LAB



COSPACE



NEAR/FAR-FIELD RANGE



CEMS



5G STEP-OUT CENTRE



DISC



SPARK CENTRE



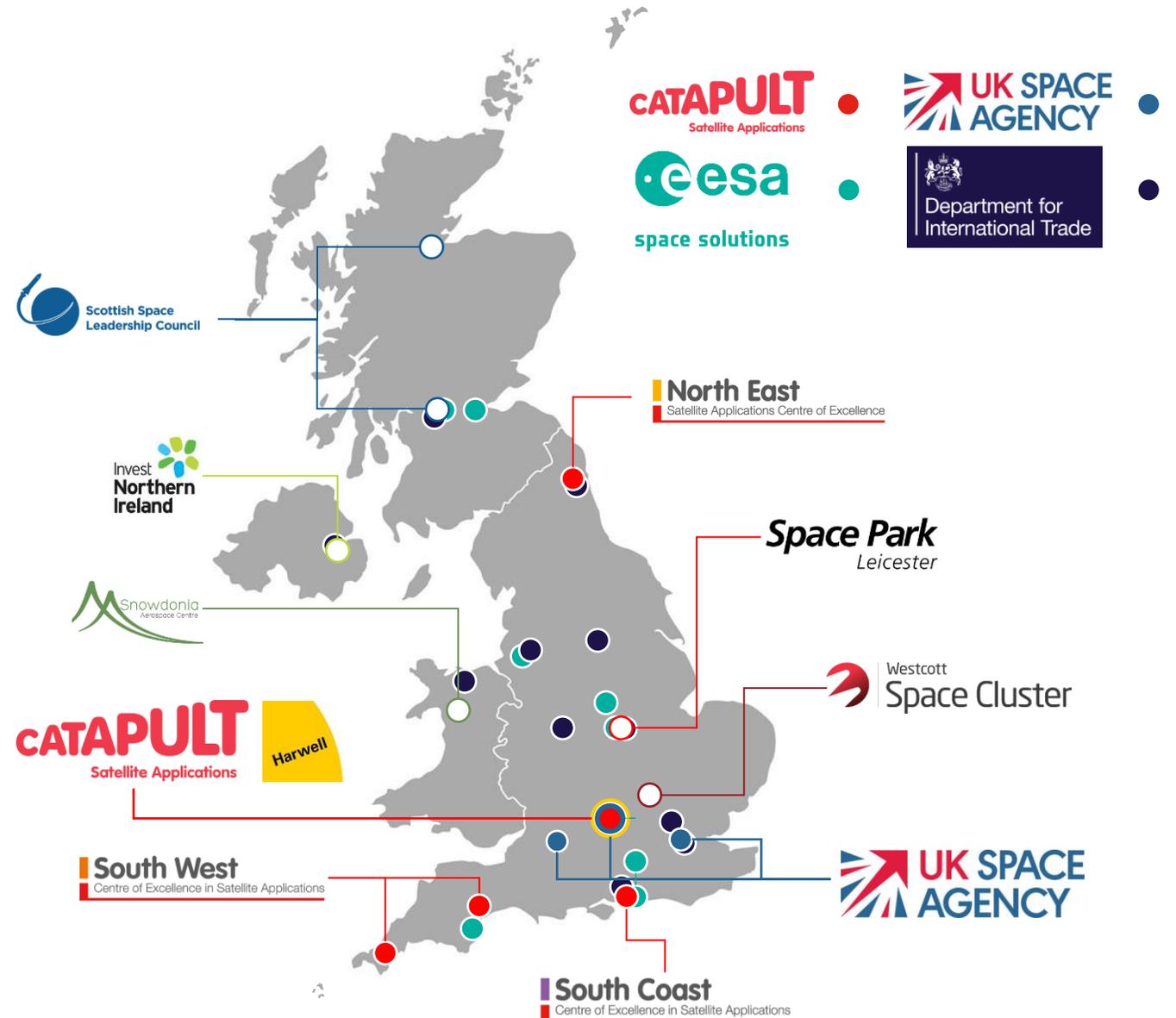
VIDEO WALL



Healthy Living Lab

SPACE ECOSYSTEM

- Catapult & UKSA Partnership since 2016.
- 2021-22 launch of joint Catapult-UKSA project to **support space sector growth across the UK.**
- Focus:
 - Support the evolution of local space Hubs & Clusters.
 - Enhance supply chains and market opportunity development across the UK.
 - Provide regional business, technical & design support services.

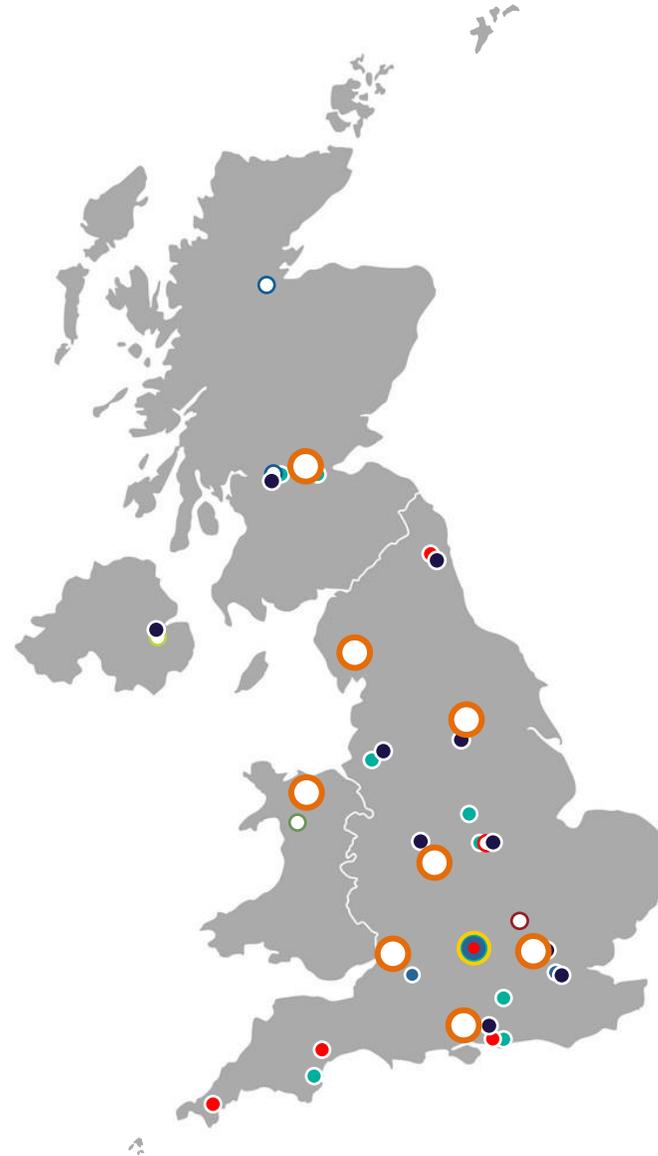


SPACE ECOSYSTEM

New Space **CLUSTERS**

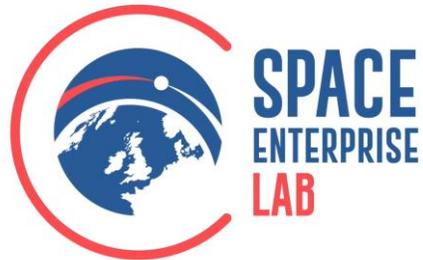
Several **new locations** are emerging, exploring opportunities for Space in across the UK. These can be found in:

- Yorkshire
- West Midlands
- North West
- Wales
- Scotland
- WECA
- EM3/Surrey-Hants
- Oxford-Cambridge Arc



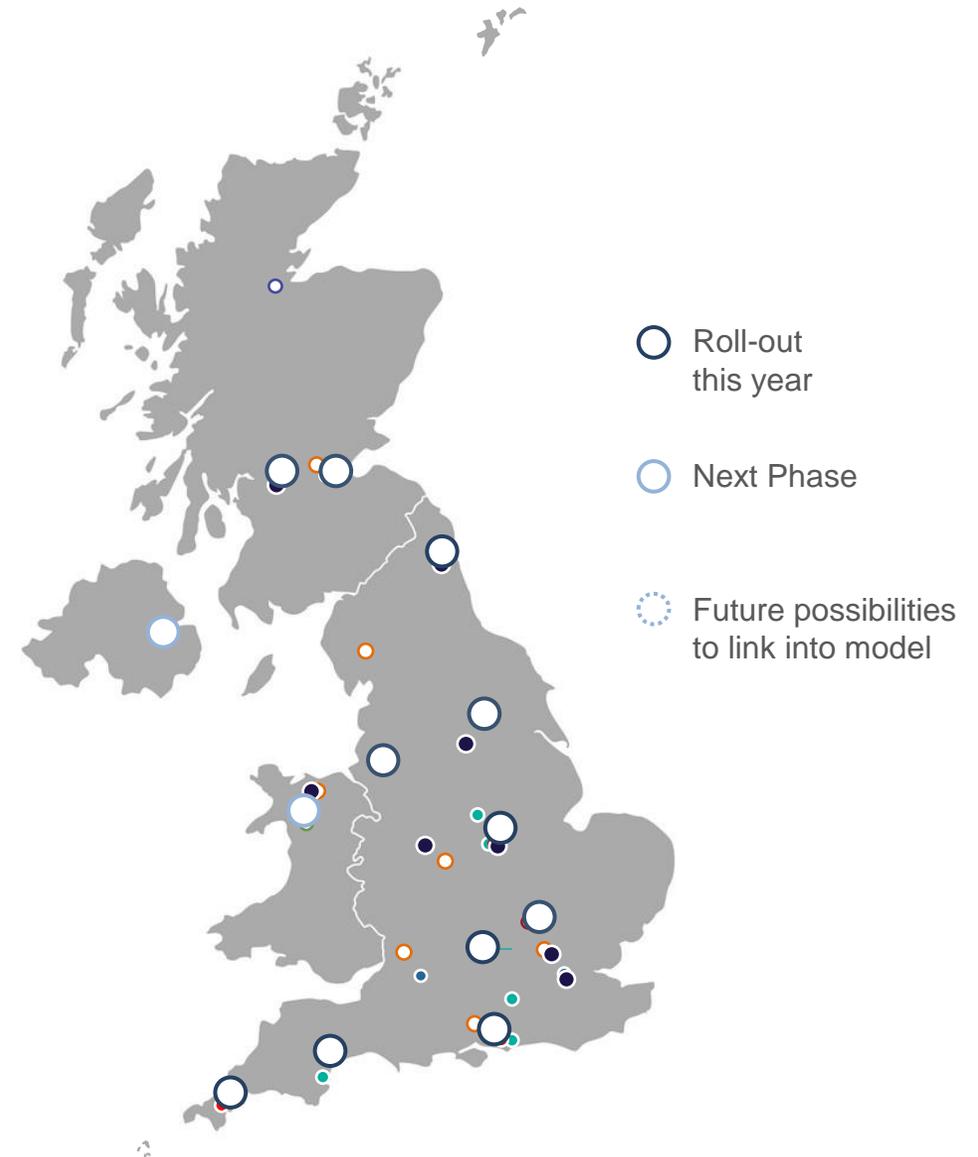
SPACE ENTERPRISE LABS

Innovation Spaces for hybrid working



The Satellite Applications Catapult has invested in a number of Space Enterprise Labs, innovation spaces set up **to support collaboration across hybrid ways of working**. From video conferencing, to event streaming, to virtual reality demos of the latest satellite capabilities.

Visit www.spaceenterprise.uk to find out more



SPACE ENTERPRISE COMMUNITY

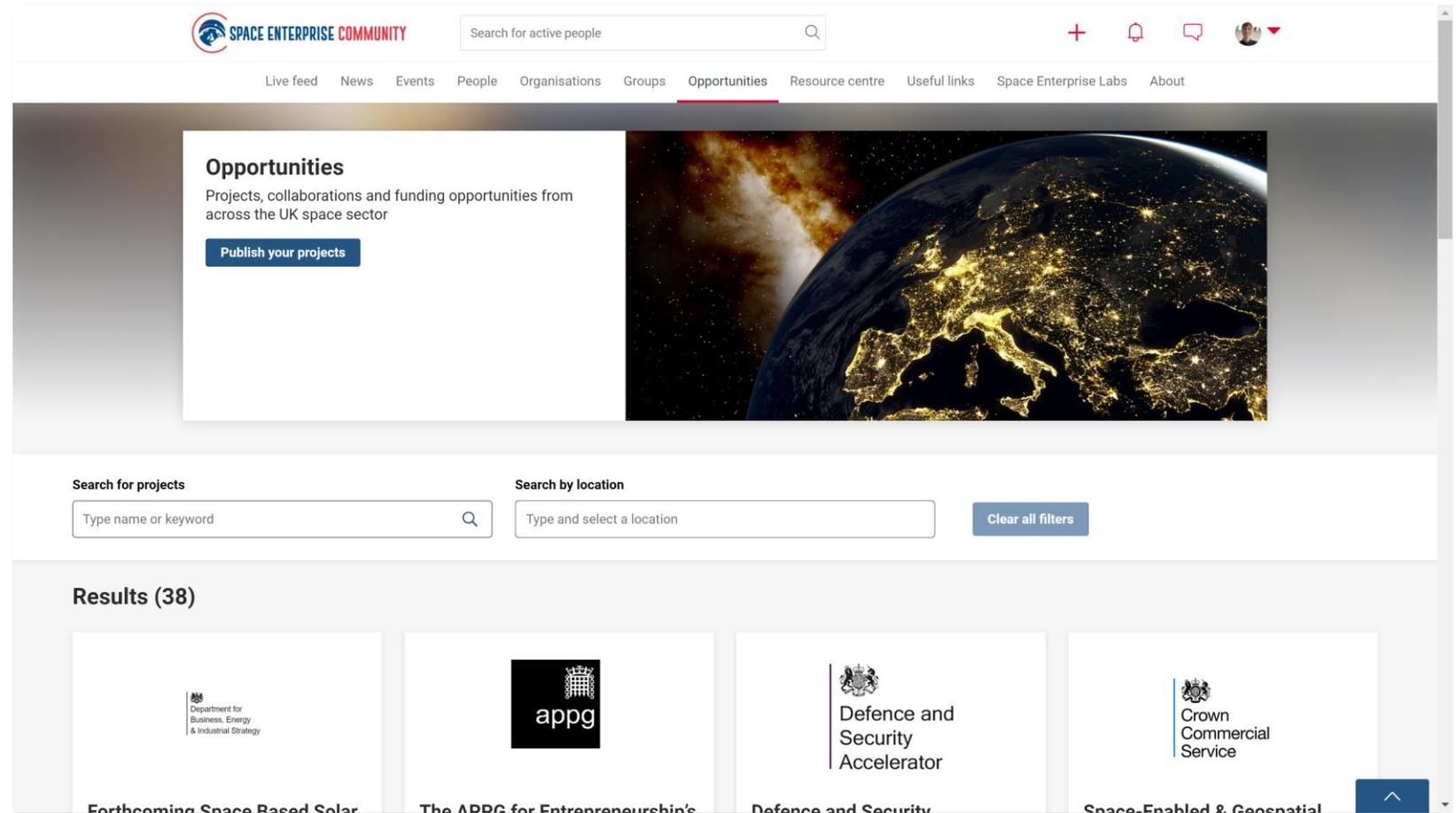
The **Virtual Front Door** to the UK Space Ecosystem

A community area and thematic groups to foster collaboration within the regional network

A resource hub to increase visibility of current activities, opportunities, and events across the sector.

To join or for more info, visit

www.spaceenterprise.uk

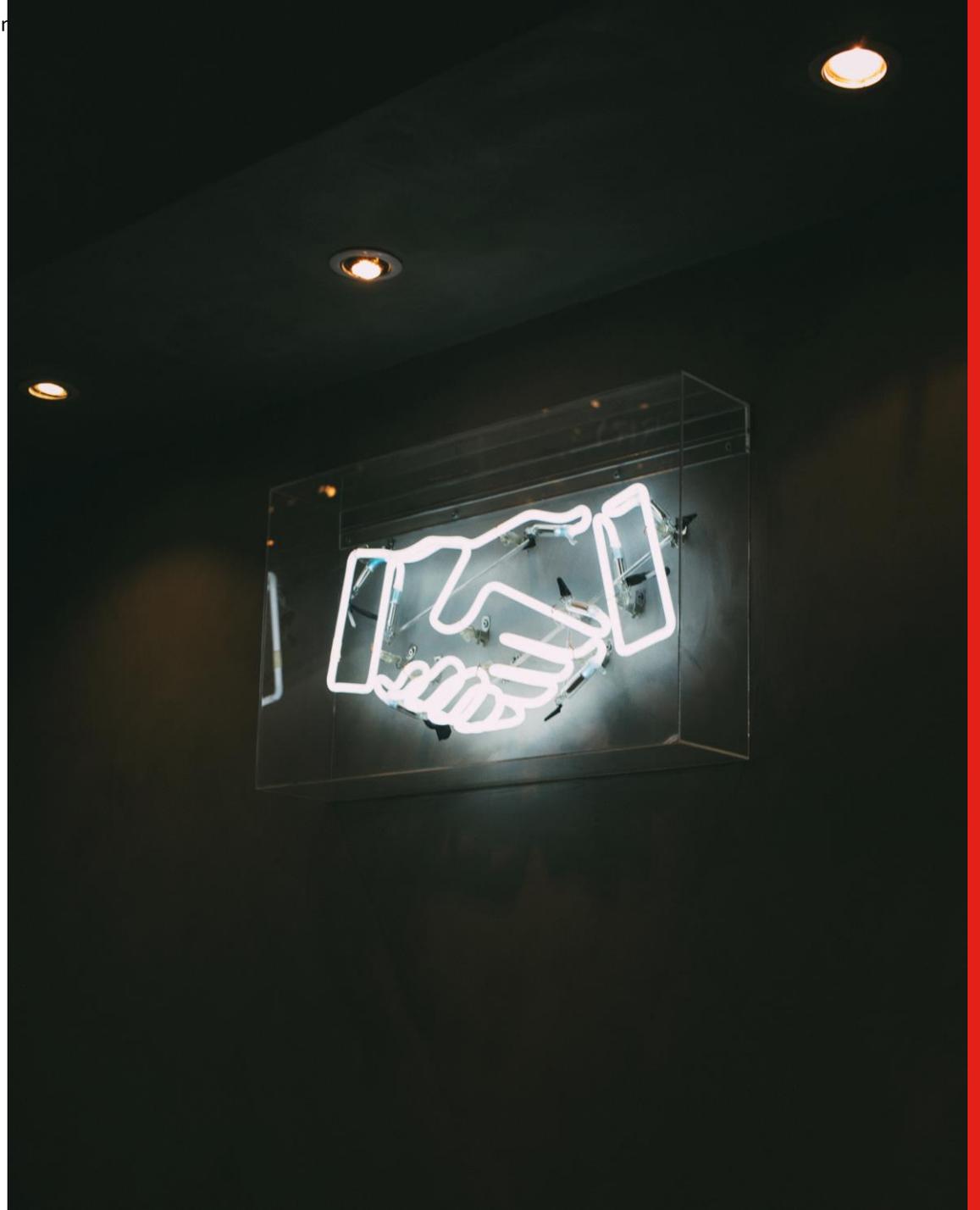


The screenshot displays the Space Enterprise Community website interface. At the top, there is a navigation bar with the logo and a search bar for active people. Below the navigation bar, there are tabs for Live feed, News, Events, People, Organisations, Groups, Opportunities (which is highlighted), Resource centre, Useful links, Space Enterprise Labs, and About. The main content area features a large banner image of Earth from space. On the left side of the banner, there is a white box titled "Opportunities" with the text "Projects, collaborations and funding opportunities from across the UK space sector" and a blue button labeled "Publish your projects". Below the banner, there are two search filters: "Search for projects" with a text input field and a search icon, and "Search by location" with a text input field and a search icon. A blue button labeled "Clear all filters" is positioned to the right of the location search field. Below the search filters, the results section is titled "Results (38)" and displays four project cards. The first card is from the Department for Business, Energy & Industrial Strategy. The second card is from appg. The third card is from the Defence and Security Accelerator. The fourth card is from the Crown Commercial Service. The bottom of the page shows the start of several project titles: "Forthcoming Space Based Solar", "The APPG for Entrepreneurship's", "Defence and Security", and "Space-Enabled & Geospatial".

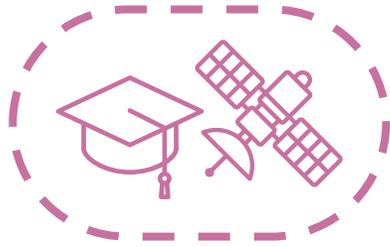
KNOWLEDGE EXCHANGE

Supporting the development and routes to market of new research by boosting the commercialisation of your ideas.

- We **build strong relationships** with research and academic organisations.
- We have experience in exploiting science and engineering research and **supporting the uptake** of new capabilities **for commercialisation**.
- We also look to attract scientific and engineering disciplines outside the space domain, encouraging them to **apply their knowledge to space-derived challenges**.
- If you are developing a new idea with satellite data, our technical and business experts can **help by supporting or collaborating where appropriate**.



KNOWLEDGE EXCHANGE



Facilitating **Partnerships**

Supporting proposals and signposting relevant stakeholders & funding opportunities



Networking Opportunities

Regular meetups and co-organised events with academia, industry, and public & private sector organisations



Supporting **Innovation & Start-up**

Supporting the development of research and new ideas through to commercialisation

KNOWLEDGE EXCHANGE

Facilitating Partnerships – Supporting proposals and signposting relevant stakeholders & funding opportunities

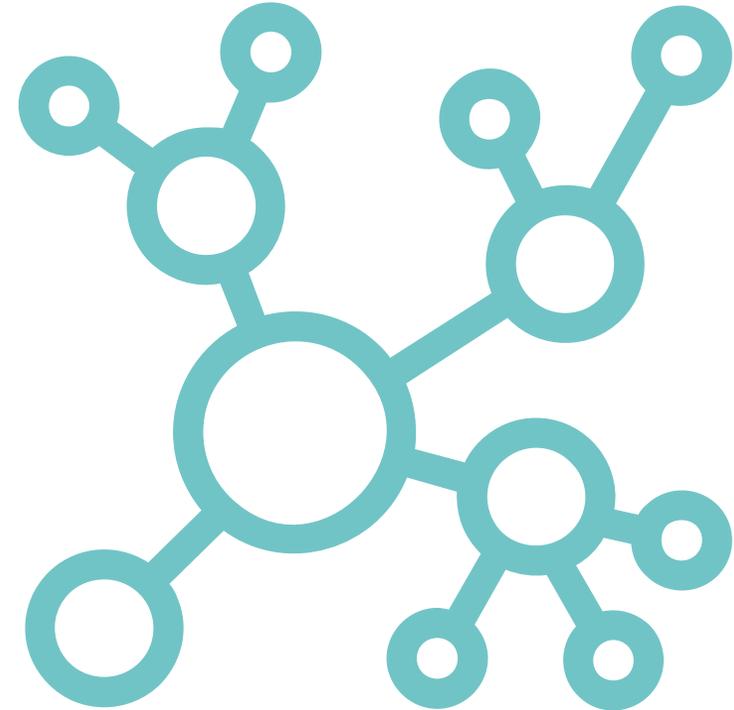
- Collaborative R&D projects
 - 23 CR&D projects with HEIs in either initiation, delivery, or completion stage since 2020
- Researchers in Residence
 - Successful programme to enable leading academics to spend research visits in one or more Catapult centres
- KE Fellowships
 - At a strategic level with their university to identify existing or intended research strengths and un-met commercial needs
- Student secondments/placements/internships
 - Supporting Centres for Doctoral Training (CDTs) / Doctoral Training Programmes (DTPs)
 - Space Placements in Industry (SPIN)
- Leveraging Impact Accelerator Accounts
 - Used on an ad-hoc basis to enable collaboration between HEIs and the Catapult



KNOWLEDGE EXCHANGE

Networking Opportunities – Regular meetups and co-organised events with academia, industry, and public & private sector organisations

- Knowledge Exchange (KE) monthly call
 - Last Wednesday of the month
- Satuccino
 - First Wednesday of the month
- Emerging Technology webinars
 - Bi-annual thematic webinar series which gets the Catapult involved with research during an early stage
- Workshops/Sandpits
 - To delve into problems and uncover innovative solutions to be investigated (in the case of sandpit: using targeted funding)
- Space Enterprise Labs
 - Enabling a Catapult presence within HEIs.
- Space Enterprise Community – Academic Network



KNOWLEDGE EXCHANGE

Supporting Innovation & Start-up – Supporting the development of research and new ideas through to commercialisation

- Access to facilities
 - State-of-the-art Catapult facilities
- Training & guest lectures
- Business advice/support
 - Start-up business support within Satellite Applications Catapult's offer
- Signposting
 - Signposting to opportunities to support innovation and technology transfer





KE CONCORDAT PRINCIPLES

- 1. Mission:** Clarity of mission is essential for efficient and effective KE (strategy, priorities, evidence, etc.).
- 2. Policies & processes:** Institutions could provide a clear set of policies & processes covering areas of KE (exploitation, access, research, engagement, etc.).
- 3. Engagement:** Build effective relationships by having clear routes to access information and expertise in the university (enquiries, agreements, arrangements, support, etc.).
- 4. Working transparently and ethically:** To understand the ethical and charitable regulatory environments in which institutions operate (published policies & requirements, respect etc.).
- 5. Capacity building:** Staff and students are developed and trained appropriately to understand and undertake roles and responsibilities in the delivery of successful KE.
- 6. Recognition and rewards:** For staff and students who perform high quality KE activities.
- 7. Continuous improvement:** proactively strive to share best practice with our peers and have established processes for learning from this.
- 8. Evaluating success:** Regular monitoring and review of strengthening KE performance (self-assessment, third-party review, governing body review, etc.)

Thank you

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