



## **\$500k allocated to five projects under UK-Australia Space Bridge**

*The first investments under the UK-Australia Space Bridge have been awarded to projects in the areas of Earth Observation, Agriculture, Space Communications, and Quantum Technologies for Space.*

**Harwell, Oxfordshire and Adelaide, South Australia, 19 Oct 2021** – Five collaborative research projects funded under the UK-Australia Space Bridge framework have been announced today by SmartSat CRC the Satellite Applications Catapult with the support of the UK [Science and Innovation Network](#), Austrade and the Australian Space Agency.

The Space Bridge program, which was managed and led by SmartSatCRC in collaboration with the other funding partners, was supported by Austrade, the Australian Space Agency, the UK Government and UK Space Agency. Respondents were required to have partners from the UK and Australia, with a minimum of one industry partner. The five selected projects were asked to address four topic areas identified as strategically beneficial to the mutual interests of each country.

The five projects will explore and advance satellite technologies for a range of uses including: Antarctic Sea ice detection; plant breeding programs and agricultural yield forecasting; preventing cyber-attacks on future financial encryption services; improving stability of next generation satellite communication links under changing weather conditions; and establishing commercial opportunities for Earth Observation calibration and validation facilities for upcoming missions of each country.

The SmartSat Chief Executive Officer Professor Andy Koronios said the projects are the first significant research activities under the Space Bridge Arrangement and the high level of interest demonstrated the appetite in both countries for collaborative opportunities.

“We have had an incredible response to this, the first collaborative initiative of the UK-Australia Space Bridge framework. We offer our sincere congratulations to the winning project proponents and are in no doubt that this is the first of many similar partnerships between Australia and the United Kingdom. The Australian Space Agency’s Roadmaps and the recently released UK Space Strategy will provide great guidance in building strong and mutually beneficial partnerships between our space industries and academia. We at SmartSat are very proud to be contributing to this effort.”

### **Quote from British High Commissioner to Australia, Vicki Treadell:**

“I am delighted to see this exciting step which brings the Space Bridge partnership to life. It demonstrates the capacity for UK- Australian collaboration that will advance technology for the strategic benefit of both our nations. I congratulate all who took part and particularly the selected projects which were of an extremely high calibre. This is a concrete example of our shared focus and investment in scientific innovation.”

### **Quote from Sam Adlen, Chief Strategy Officer at the Satellite Applications Catapult:**

“It is great news that today we see the first projects benefit from funding through the UK-Australia SpaceBridge. The fantastic response demonstrated the huge potential for partnership in delivering against joint Australian-UK priorities, and in addressing global challenges like climate change. We hope the programme will be the start in building strong collaborations between the UK and Australia, to benefit companies in both countries and to strengthen the ties between our respective space industries, governments, and end users. Innovation and collaboration across borders are a vital part of future

economic growth and a key element of our work at the Catapult, and this initiative is a shining example of how working together leads to the most productive outcomes.”

**Quote from Massimiliano Ladovaz, CTO Space Segment of OneWeb:**

“The funding of OneWeb’s project with RMIT to increase data throughput and better utilise frequency spectrum for space communication will help deliver significantly higher broadband speeds to the remotest parts of the world. We draw on this type of research to design our next generation of satellites and working with RMIT is an exciting opportunity for experts from academia and industry in both the UK and Australia. I congratulate the team at RMIT and look forward to hearing about progress of this important initiative.”

**Theresa Condor, Executive Vice President and General Manager of Spire Space Services:**

“We are excited to be working with our Australian academic partners and the British Antarctic Survey on this important project for the monitoring Antarctic sea-ice using the Spire constellation 3U satellites. Record low levels of sea ice are leading to warming temperatures which affect sea level rise, ocean circulation, and weather patterns. As part of the research activities under the UK-Australia Space Bridge Framework, it is clear that there is appetite in both countries to collaborate and validate new satellite data sets, helping to monitor new waterways created by the melting ice. This research will help support critical missions such as search and rescue, safe marine operations, fishing, water quality, and climate change monitoring. This is a great demonstration of academic, industry and research bodies working collaboratively to help solve global challenges.”

The projects selected are:

- ***Cal/Val Space Bridge: An Earth Observation Partnership***  
Symbios Communications, Frontier SI and Assimila Ltd, The National Physical Laboratory
- ***Modelling novel radio spectrum bands for next generation satellite networks***  
RMIT University and OneWeb
- ***IceCube: Monitoring Antarctic sea-ice with small satellites***  
UNSW Sydney, University of Tasmania (Australia Australian Centre of Excellence in Antarctic Science, Australian Antarctic Program Partnership) and Spire Global UK, British Antarctic Survey
- ***Australia’s Quantum Leap: to satellite quantum encryption***  
Arqit Limited and Australian National University
- ***Harvesting hyperspectral satellite data to improve crop production***  
Digital Content Analysis Technology Ltd, InterGrain, and The Plant Accelerator, Australian Plant Phenomics Facility, The University of Adelaide

The five projects must be completed by 30 June 2022 and were selected on their potential for larger future collaborative research projects which will grow industry capacity, provide an innovative end-product or capability, and build upon the respective space ecosystems of each country.

\*\*\*\*\*ENDS\*\*\*\*\*

**SMARTSAT CRC ENQUIRIES:**

**Alison Bowman**

Communications and Media, SmartSat CRC

0481 273 462 | [alison.bowman@smartsatcrc.com](mailto:alison.bowman@smartsatcrc.com)

**ABOUT THE SMARTSAT CRC**

The SmartSat Cooperative Research Centre brings together over 100 national and international partners who have invested over \$190 million, along with \$55 million in Federal Government funding under its Cooperative Research Centres Program, in a \$245 million research effort over seven years. Working closely with the Australian Space Agency, SmartSat will make a strong contribution to the Australian Government’s goal of tripling the size of the space sector to \$12 billion and creating up to 20,000 jobs by 2030. Priority industry sectors for SmartSat include telecommunications, agriculture and natural resources, transport and logistics, mining, and defence and national security.