



Socio-economic impact assessment of the ARTES 4.0 programme

Case study portfolio

European Space Agency

13th December 2024

5G/6G Hub ARTES Space for 5G/6G

Creating a focal point for hybrid 5G innovation to support UK Government's 5G/6G strategy

- Creating a UK hub for collaboration and innovation in satellite and terrestrial telecommunications



LEVERAGING ESA'S SUPPORT

- Built & developed through ESA funded project
- Launched in February 2022, at ESA's European Centre for Space Applications and Telecommunications (ECSAT) in Harwell, UK.
- Fosters collaboration for demonstrations and applications
- Hub expansion supported by ESA began in 2023



"This is the first time that ESA has established a 5G/6G Hub in a member state, demonstrating the UK's position as a world-leader in satellite telecommunications and establishing a flagship facility that will support further growth for this thriving sector."

SUCCESS & OPPORTUNITY

> £3m in UK government investment



8 contracts with companies & academia

Acceleration of technology development



Funding opportunities to integrate technology into the 5G/6G Hub

Testing facility in hybrid satellite-terrestrial 5G environment



EXPANDING EUROPEAN CAPABILITIES & COLLABORATION

- This project supports collaboration between different industry players and ESA member states
- Maximises the benefits to the UK of 5G, with the goal to connect to other 5G hubs globally and support the emergence of 6G
- Simulation of lunar connection conducted in collaboration with University of Luxembourg

TECHNOLOGY

APPLICATION

END-TO-END SYSTEM



London Economics



→ THE EUROPEAN SPACE AGENCY

