



Nov 19, 2024 14:08 GMT

## Major boost for North East space sector following £2.5 million investment

The North East's reputation for world-class space research and innovation has been recognised with the announcement of £2.5 million from the Engineering and Physical Sciences Research Council (EPSRC).

The funding has been awarded to a consortium of academic, civic and industry partners who together will form the North East Space Communications Accelerator (NESCA), which is one of EPSRC's place-based impact acceleration accounts (IAAs). IAAs aim to deliver impact activities to benefit a research and innovation cluster, in collaboration with civic, business, and other local stakeholders.

Over the next four years NESCA will build on recent investment in space skills, research and innovation in the region, creating new opportunities for knowledge exchange that lead to quality impact, including high-skilled jobs and economic growth.

NESCA is a collaboration between Northumbria, Durham, and Newcastle universities, the North East Combined Authority, Space North East England, and the North East Space Leadership Group, as well as 14 industry partners.

It aims to support the UK's ambition to become a leader in the global space industry by bringing together academic research with business and commercial expertise to contribute directly to the growth of the national space ecosystem.

<u>Professor Vincent Barrioz</u>, of Northumbria University's <u>Department of</u> <u>Mathematics</u>, <u>Physics and Electrical Engineering</u>, leads the project.



He said: "The North East is recognised as a prime location for the rapid growth of space innovation, skills development, investment, and industry, which, if nurtured, will transform the industrial landscape of the region.

"NESCA will provide the structure and resources to ensure that innovation taking place in our universities is driven by, aligned with, and delivered in collaboration with regional partners to deliver place-based impact.

"Specifically, it will bridge the gap between space research and industryready products launching in the market."

NESCA will focus primarily on the development of new resilient space communications technology – a key element of many space applications and an area in which the North East has already developed a reputation for excellence.

The funding will support three key strands of focus over the next four years – innovation, place, and people.

An innovation fund will support promising ideas through the commercialisation process, from proof of concept and feasibility towards market.

A proportion of this will be made available for universities and organisations outside of the North East region who have specific expertise in space communications-related research.

The place strand will focus on delivering regional and national priorities for the space sector, including promoting the North East at national and international space industry events, and increasing public awareness of the space sector through engagement activity.

This will be achieved in partnership with the newly established <u>North East</u> <u>Combined Authority</u>, led by North East Mayor Kim McGuinness.

A North East Combined Authority spokesman said: "This investment shows

the scale of ambition there is for the space industry in the North East, and the strength of the partnerships we are building to realise those ambitions.

"Space research and innovation is creating jobs at every level, with plans for 10,000 in the region by 2030. We have no shortage of bright and talented people. We'll make the North East the home of real opportunity by developing the skills and inspiration needed to take advantage of the full range of opportunities the space industry can offer."

Meanwhile the people strand will focus on providing the skills required within the space sector, from student summer schools, to continued professional development for those already working within the industry.

The three universities involved in NESCA all boast world-class research and teaching expertise in space technology and communication, as well as stateof-the-art facilities to support new commercial innovations.

Northumbria University is currently constructing a £50 million <u>North East</u> <u>Space Skills and Technology Centre</u>, with investment from the UK Space Agency and the space and satellite division of industry giant Lockheed Martin.



Durham University's new £5 million <u>Space Research Centre</u> has been created to ensure a sustainable future in space. With a focus on responsible innovation, the centre connects Durham's multi-disciplinary experts across space technology, operations, and governance to provide world-leading research and training.

<u>Professor James Osborn</u>, Director of Durham's Space Research Centre, said: "This is an exciting opportunity that represents a crucial step towards positioning North East England as a leader in space innovation.

"NESCA's collaborative approach brings together a range of diverse expertise to advance sustainable space technologies and resilient communications systems.

"This initiative not only strengthens our region's capabilities but also aligns with our commitment to creating long-term, responsible solutions for space exploration."

Newcastle University's space research spans many schools, with a strong presence in artificial intelligence (AI) and spatial data analytics, earth observation, communication, and observational astrophysics.

The university has an <u>EPSRC Centre for Doctoral Training (CDT) in Geospatial</u> <u>Systems</u> that trains the next generation of PhD graduates and closely works with industrial partners.

Newcastle University's academic lead <u>Dr Deepayan Bhowmik</u>, a Senior Lecturer in Data Science at the School of Computing, expressed his gratitude to EPSRC:

"With the recent and rapid growth in North East's space industry, NESCA is a timely investment from EPSRC that will boost the innovation and impact in the region. Resource availability through NESCA will strengthen industryacademic engagements even more and support regional skills development.

"Leveraging the School of Computing's strength in applied Data Science & AI,

Newcastle University will lead in delivering AI in Space research and skillsrelated activities within NESCA that nicely complement the other two university partners."

NESCA is one of seven new projects announced today by EPSRC and funded through its Place Based Impact Acceleration Account (PBIAA) scheme. Sharing £22m between them, the projects will all strengthen emerging and existing research and innovation clusters to kickstart economic growth and address regional needs.

EPSRC Executive Chair Professor Charlotte Deane said: "The seven projects announced today will harness regional research and innovation strengths to unleash the potential of emerging and existing innovation clusters across the UK.

"Our investment will strengthen partnerships between UK universities, civic bodies and local businesses to create new jobs, improve skills and boost regional economic growth that will benefit places and communities directly."

UK Science Minister Lord Vallance said: "We are backing universities across the UK to home in on local strengths in research – to support thousands of local jobs, boost skills and bring new technologies to market.

"This investment will allow innovators up and down the country to continue or expand their pioneering work to improve lives and kickstart growth in our economy with new opportunities."

NESCA will launch in early 2025. Organisations or individuals interested in finding out more about the opportunities being created through NESCA can email <u>nesca@northumbria.ac.uk</u> for more information.

UNIVERSITY OF THE YEAR 2022 (Times Higher Education Awards)

Northumbria is a research-intensive university that unlocks potential for all, changing lives regionally, nationally and internationally.

Two thirds of Northumbria's undergraduate students come from the North East region and go into employment in the region when they graduate, demonstrating Northumbria's significant contribution to social mobility and levelling up in the North East of England.

Find out more about us at www.northumbria.ac.uk

--- Please contact <u>media.communications@northumbria.ac.uk</u> with any media enquiries or interview requests ---

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