

New government plans to fire up innovation in 5G and 6G as UK and South Korea launch telecoms technology partnership

Universities and telecoms firms have been invited to apply for up to £25 million to research and develop the next generation of 5G and 6G network equipment as part of new government plans to unleash innovation in the sector.

The Future Open Networks Research Challenge will enable academics and the industry to conduct early-stage research into open and interoperable telecoms solutions, such as Open Radio Access Network (Open RAN), for use in 5G and future networks such as 6G.

The government is accelerating the development of this technology – which allows operators to mix and match equipment rather than relying on a single supplier when building or maintaining networks – as part of its £250 million Open Networks R&D Fund. It aims to build more secure and resilient broadband and mobile infrastructure by boosting competition and innovation within the telecoms supply chain.

It comes as £10 million has been awarded to launch the UK Telecoms Innovation Network (UKTIN), a new body dedicated to boosting creativity in the country's telecoms supply chain.

The UKTIN will act as an information and ideas hub for industry and academics looking to access funding or R&D testing facilities and opportunities to collaborate on developing new mobile and broadband technology. Digital Catapult, CW (Cambridge Wireless), University of Bristol and West Midlands 5G are announced today as the winners of the competition to set up and oversee the network.

In a further boost to the industry, the UK will also invest £1.6 million in a joint-funded £3.6 million competition with the Republic of Korea to collaborate on a world-first R&D project to accelerate the development of Open RAN technology.

Each country will fund a group of several companies to work together to accelerate the development of technical solutions to improve power efficiency in Open RAN networks. Power consumption is a major operating cost, so the work will support wider adoption of Open RAN technologies, reduce operating costs and support net zero ambitions.

Digital Infrastructure Minister Matt Warman said:

The seamless connectivity and blistering speeds of 5G and then 6G

will power a tech revolution which will enrich people's lives and fire up productivity across the economy.

It's why we're investing millions and partnering with international allies to unleash innovation and develop new ways to make these networks more secure, resilient and less reliant on a handful of suppliers.

Chief Executive at Mobile UK Hamish MacLeod said:

Mobile UK welcomes today's announcement. A strong, diverse mobile ecosystem in the UK will be a cornerstone of the country's future prosperity and well-being.

The measures announced today offer further opportunities to build on the UK's thriving R&D into advanced telecoms, and enabling operators to access more diversity in the supply chain while enhancing security and innovation.

Future Open Networks Research Challenge

This scheme will fund several consortia of universities and suppliers to conduct early-stage research and development of telecom solutions sustaining openness and interoperability for 5G and future networks such as 6G.

These early-stage projects will draw on the UK's impressive depth of research, development and industrial capability to ensure that open and interoperable telecoms solutions become commercially viable and suitable for inclusion in future telecoms standards.

£25 million will boost skills of the next generation to enter the workforce, enhance educational capabilities, and bring expertise to a broader range of universities and businesses that will support the UK to grow presence and influence within the global supply chain.

UK Telecoms Innovation Network competition winners

The UKTIN, first announced in March, aims to make the UK the easiest place in the world to access and take part in telecoms R&D. It will guide businesses and researchers looking to access funding or testing facilities in the UK and enable the best use of public and private investment in R&D, as well as ensuring that knowledge is effectively and efficiently shared across the telecoms industry.

UKTIN is expected to be up and running in September, at which point it will begin to take over from UK5G to help organisations get the most out of what the UK has to offer.

On behalf of the winning UKTIN consortium, Jeremy Silver, CEO of Digital Catapult said:

With the UK Telecoms Innovation Network, we have an exciting opportunity to transform UK telecoms into a growing, resilient, secure and globally significant sector. The UK has many strengths but our ecosystem across research, development and innovation is fragmented. I am proud to be joined by a strong consortium of partners (Digital Catapult, Cambridge Wireless, University of Bristol and WM5G) who each bring their own expertise and experience that will prove vital in coalescing and expanding our ecosystem and driving future UK capabilities”.

UK-Republic of Korea Competition Launch

This competition is open to applications from consortia with two or more members from relevant industry, academic or public sector organisations, with funding available for activity taking place in the UK.

Bids must be submitted by noon on 20 September 2022. Application guidance is available on gov.uk.

Ends

Notes to editors

- More information about the [Open Networks R&D fund](#)
- More information about the [Future Open Networks Research Challenge](#)
- Consortia applying for the Future Open Networks Research Challenge should be led by universities with participation of at least one large vendor, and can also include mobile network operators and other industrial partners. Proposals must be submitted by 03 October 2022, but consortia can submit an optional expression of interest (EOI) until 12 August 2022 to receive feedback from DCMS on their proposed research ideas. Application guidance is available on gov.uk.
- The UK government is providing up to £1.6 million funding for the UK-ROK competition (to be matched by industry) and ROK £1.5 million (with £0.5 million from industry). Projects are expected to run until March 2024.
- Enquiries for the UK Telecoms Innovation Network should go to enquiries@uktin.net.