



UKTIN


Unleashing the UK: a telecoms powerhouse


EVENTS

WHAT'S HAPPENING?

Hear and engage with the UKTIN team at these events over the coming months

UPCOMING UKTIN EVENTS		
04 DEC	INTERNATIONAL & HORIZON ENGAGEMENT CONFERENCE	LONDON
10 DEC	FUTURE CONNECTIVITY 2025	ONLINE
12 DEC	UK GOVERNMENT INNOVATION DISCUSSION	ONLINE
21 JAN	THE ROLE OF NEW UK TECHNOLOGIES IN CONNECTIVITY	ONLINE
28 JAN	DRIVING ADOPTION CONFERENCE	LONDON
06-29 JAN	TRANSFORMING TELECOMS PROGRAMME: COMMERCIALISATION THROUGH PARTNERSHIPS	ONLINE
06-30 JAN	TRANSFORMING TELECOMS PROGRAMME: INVESTMENT	ONLINE
03-26 FEB	TRANSFORMING TELECOMS PROGRAMME: COMMERCIALISATION THROUGH PARTNERSHIPS	ONLINE
03-27 FEB	TRANSFORMING TELECOMS PROGRAMME: INVESTMENT	ONLINE
18 FEB	THE BUILDING BLOCKS FOR EFFECTIVE FUTURE NETWORKS IN THE UK	ONLINE
24 FEB- 19 MAR	TRANSFORMING TELECOMS PROGRAMME: COMMERCIALISATION THROUGH PARTNERSHIPS	ONLINE
03-27 MAR	TRANSFORMING TELECOMS PROGRAMME: INVESTMENT	ONLINE
OTHER EVENTS		
03-06 MAR	MOBILE WORLD CONGRESS	BARCELONA

Review all the details of upcoming telecoms events here 



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UK INNOVATION IS AT AN EXCITING JUNCTURE



Ian Smith, Head of UKTIN

Connectivity has, and always will, underpin societal and economic growth. Fortunately, the UK telecoms sector is rife with innovation and potential.

Our universities are leading world-class research and countless start-ups and organisations are doing fantastic work pushing the boundaries of our sector and continuing to advance connectivity across the UK.

“COUNTLESS START-UPS AND ORGANISATIONS ARE DOING FANTASTIC WORK PUSHING THE BOUNDARIES OF OUR SECTOR”

To further the UK’s ambitions on digital communications, UKTIN has recently hosted a fascinating event exploring commercialisation. Hearing so many perspectives, anecdotes and insights always highlights the richness of talent and expertise in our sector. But there were some particular takeaways that make me optimistic about the path into 2025 and beyond.

We grumble a lot that investors aren’t interested enough in telecoms. Yet our commercialisation event demonstrated that there is money to be had - for the most promising start-ups. Having a great idea however is not enough, you need to be solving a genuine market need.

Alongside our Adoption Working Groups, we’ve been reflecting on the difficulty of achieving broad scale adoption. But also that places throughout the UK are already harnessing the potential of advanced connectivity to transform transport, health and social care. So how do we scale to ensure all our regions and nations can equally benefit? We’ll need to be transparent about the challenges and pragmatic about how to tackle them.

These insights also highlight why the work of UKTIN is so essential. We’re here to provide the resources and guidance for both small and large organisations to access the support they need. To test whether their great ideas really do have market demand, and to help connect them with potential partners to realise their ambitions. To provide the unvarnished insights and learnings around how to rollout connectivity solutions, from tips on building business cases to some practical things to do

(and not do!). And to provide a route into policymakers in Government, helping them navigate an extremely complex area.

“WE’RE HERE TO PROVIDE THE RESOURCES AND GUIDANCE FOR BOTH SMALL AND LARGE ORGANISATIONS TO ACCESS THE SUPPORT THEY NEED.”

Looking forward, it’s nearly time for the next Mobile World Congress and at UKTIN we’ve already been working hard to showcase the very best of the UK at Barcelona. We’ll be in the UK Innovation Pavilion, demonstrating the important role our network plays within the sector.

With the help of UKTIN, we can cement the UK’s position as a telecoms powerhouse and drive the next wave of growth and innovation.

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INDUSTRY NEWS

from across the sector

HOLD STEADY: GREATER NETWORK ENERGY EFFICIENCY RAMPS UP

A challenging environment is breeding innovation

With the war in Ukraine approaching its three-year mark, rocky energy prices have become a daily norm. These ripple effects continue to reach far beyond the region's embattled borders, in tandem with ongoing energy crises related to extreme weather events. Within telecoms, optimising the energy efficiency of crucial networks continues to be an urgent, challenging concern. The industry has responded with innovation.

Ericsson has made significant progress with its Site Energy Orchestration solution forming a bridge between radio access networks and power grids to optimise operations and boost cost savings, reduce carbon footprint, and open new revenue streams in the process. Virgin Media O2 has honed in on smart

cost savings too, working with EkkoSense to map thermal, power, and capacity performance across 20 key UK data centre sites in real time — and optimise operations in response.

Digital Catapult's SONIC Labs Technology Access Programme is also underway, with Net AI, the University of York School of Physics, Engineering and Technology, and zTouch Networks all working to develop, build and implement new solutions to make the global Open RAN market more sustainable and energy efficient.

For more on telecoms energy efficiency, scan here: 



AI ALLIANCES IN TELECOMS SIGNAL A MATURING APPROACH

Shaking off the AI hype



The Global Telco AI Alliance formed in summer of 2023, with Deutsche Telekom, e&, Singtel and SK Telecom as its founding members. Since then, the group has continued to grow, signing a joint venture in July this year for the development of telecoms-specific large language models (LLMs). These LLMs will be multilingual in Korean, English, German, Arabic, and Bahasa, among other languages, and tailored to the needs of the founding parties in their respective markets, allowing them to reach a customer base of 1.3 billion across 50 countries.

Among the founders of the AI-RAN Alliance, meanwhile, are Arm, Deepsig, Ericsson, Microsoft, Nokia, Northeastern University, Nvidia, Samsung, SoftBank, T-Mobile, and UTokyo. This group, with its core focus of integrating AI into cellular technology to enhance RAN performance and mobile network capabilities, takes a cross-disciplinary approach that brings together technological, commercial, and academic institutions.

Along with the ongoing flurry of commercial partnerships being struck up between telco players and AI upstarts, these solidifying alliances suggest a growing maturity among telecoms players in the face of AI's accelerating hype cycle. But as the hype cools, and opportunism wanes, more strategic, considered and joined-up approaches are beginning to prevail — with telecoms leading the way.

Scan to read the latest AI news: 



NATIONAL EXPERIMENTATION PLATFORM LAUNCHES FOR 6G

JOINER is an exciting first for UK telecoms



Connecting 11 'nodes' across the the United Kingdom, JOINER brings together research leaders and test networks to provide a platform offering the real-life conditions needed for everything from experimental research to exploitation, skills development, and adoption testing. It is open to all: universities, large corporates, spin-outs and start-ups, SMEs, and government bodies.

Funded by the UK Department for Science, Innovation and Technology (DSIT) via the Engineering & Physical Sciences Research Council (EPSRC) Technology Missions Fund, the project's core aim is to accelerate the process of validation and co-creation of 6G technologies and applications. JOINER does this by coordinating and federating new future networks testbed initiatives for research, innovation, and adoption trials.

Led by the University of Bristol, the project officially launched to the world in October. Now, JOINER's members are inviting interested parties to submit applications for use of the platform when it goes fully live in 2025.

Explore the JOINER project:



NEWS BYTES

WHAT'S UP, WHAT'S DOWN, AND WHAT'S AROUND THE CORNER IN THE TELECOMS SECTOR THIS QUARTER

Deals on the docket:

Telesat is one step closer to punting its Lightspeed Low Earth Orbit broadband satellite constellation into space, after agreeing a funding deal with the Canadian and Quebecois governments worth CA\$2.5bn. Meanwhile, in the UK, CityFibre has inked a long-term partnership with Sky to extend its network reach, and key terms have been agreed in TalkTalk Group's refinancing agreement.

Boom times:

Revenues in the 5G security software market are on course to treble within the next five years, according to forecasts from ABI Research, stretching to over \$4.6 billion thanks in large part to a push for API proliferation. Private RAN revenues are growing too, following concerted pushes into the space from Nokia, Ericsson, and Samsung. And smartphone numbers are also on the up: worldwide shipment numbers are projected to grow by 5.8% year-on-year according to IDC.

Double dip:

Q2 was rough for the mobile core network market, which cratered 15% to a historic low. The optical transport equipment space fared worse, falling by 19% across the same period. Among the tech giants, Cisco announced it would cut 6,500 jobs, and the extent of Intel's struggles have been writ large in a proposed US government bailout worth \$8.5bn and 15,000 job losses.

CMA OK:

The Competition and Markets Authority has issued provisional approval for Vodafone and 3's planned merger, indicating that the proposed £15 billion joint venture could proceed if certain conditions to protect competition and consumers are met. Vodafone and 3 have previously made commitments to maintain tariffs and continue with network investment.

UKTIN NEWS

SETTING HIGH STANDARDS

Specialised support for SMEs who want to see their IP go further

The UKTIN Standards programme — which supports SMEs as they navigate the complex world of telecoms standards — is now running at full tilt.

“PROSPECTIVE SMES CAN EXPLORE AND UNDERSTAND THE STANDARDS ECOSYSTEM”

Alongside a regular schedule of educational webinars, three dedicated standards veterans are on hand to provide tailored advice to SMEs. This includes pointing start-ups in the direction of the standards bodies that are most relevant to their IP offerings; answering direct queries on specific bodies; sharing insider insights into the various nuances of how each body functions; providing reporting from standards body meetings; and establishing introductions and connections between UKTIN members and standards groups.



For those still in the earlier stages of considering the standards journey, UKTIN provides an online Standards hub. This space is designed as an educational forum, where prospective SMEs can explore and understand the standards ecosystem: hearing directly from those who have already trodden the path on the hard and soft benefits, and practical reality, of achieving standards acceptance.

Scan to explore the UKTIN Standards hub:



UKTIN, MEET UKTINDIA

Flying the flag at India Mobile Congress

UKTIN International Specialist Adviser Dinesh Patil was among a delegation of business innovators visiting India this autumn, as part of Innovate UK's Global Business Innovation Programme for Future Telecoms.

Established as a 9-12 month programme, start-ups were invited to apply to join trade missions to one of three countries — Japan, India, or the USA — with the aim of growing and scaling on a global stage through building R&D, innovation collaborations and partnerships.



UKTIN's Supplier Specialist Guidance Service supported Innovate UK on the initiative, promoting the scheme, and supporting early stage companies through the application process.

On the plane with Dinesh were AccuLink Technology, Bikal Technologies, FlexiFone Telecommunications, Mission Critical Applications, Praeferre, pureLiFi, Sceenic and Slicefinity, representing some of the UK's finest innovation in network slicing, interactive viewing experiences, data privacy, AI and more.

The trip was a rush of industry meetings, site visits, networking events, and pitch-and-panel sessions uncovering the nuances of India's telecoms ecosystem. This all culminated on the floor at India Mobile Congress in New Delhi, where Dinesh flew the UKTIN flag and worked to raise the profile of UK telecoms and the opportunities it offers, in turn, to Indian telco players.

Scan to find out more about how UKTIN's Specialist Advisers can support you:





NUMBERS CRUNCHED AT UKTIN'S FIRST COMMERCIALISATION CONFERENCE

Money talks

More than 100 attendees packed out London's BMA House in October for UKTIN's inaugural Telecoms Commercialisation & Network Economics Conference.

Bringing together industry leaders, market analysts, policymakers, investors, and start-ups, the day's aim was to address the key challenges and opportunities associated with commercialisation and economics more broadly within the telecoms space. It was a day of unvarnished truths, hard facts — and reasons to be positive.

The conference kicked off with a morning plenary session, which set out the current state of telecoms and tech valuations, shedding light on current industry economics and financial trends. Honesty emerged as a key theme for the day, as speakers and workshop leaders would go on to address what more than one attendee described as “the elephant in the room.” Ian Smith, UKTIN's head, put the challenge most plainly: “Commercialisation is crucial to our sector; and our sector underpins all others.”

Ian Corden, CEO of Peira Consulting, noted the high R&D costs, high capital intensity, 10-year evolution cycles, and high barriers to entry that make telecoms a challenging environment for commercialisation. These factors make the space a tough sell to investors, but pockets of innovation within areas like private networks, neutral hosts, FWA and vertical 5G mean there are growth opportunities for the sector to shout about.

Also up for discussion were the findings of UKTIN and Pitchbook's joint report into UK telecoms investment. Presenting figures indicating growth in VC investment, as much as £1.4bn invested in UK telco over the last four years, and an increase in median deal size (at around £3m), Nalin Patel, Pitchbook's lead private capital analyst, argued there was plenty to be positive about.

“POCKETS OF INNOVATION WITHIN AREAS LIKE PRIVATE NETWORKS, NEUTRAL HOSTS, FWA AND VERTICAL 5G MEAN THERE ARE GROWTH OPPORTUNITIES FOR THE SECTOR TO SHOUT ABOUT”

Those with an immediate focus on investment opportunities were able to join a workshop led by Bristol Innovations. Participants met with both active investors in the telecoms sector and high-growth telco start-ups to unpick the key emerging trends in UK telecoms investment for start-up founders, angel investors, and VC fund associates and partners. Michelle Taychers Nishry, Senior Investment Manager from Qualcomm Ventures, had a clear message: “We're more interested in the problems start-ups are solving than the solutions they're developing. What is the problem space and the real pain that people are willing to pay for?”

Read the full event report here:



SUCCESS STORIES

GROWTH, FUNDING GOALS, AND INDUSTRY RECOGNITION — ALL IN A DAY’S WORK

UKTIN’s first support cohorts are beginning to blossom

A key tenet of our work in UKTIN is helping our members to carve paths from concept to commercialisation.

Investors are clear that telecoms can be a tricky sell, but also that innovative solutions to real-world problems will always be worth backing. Coaching from our investment and innovation programmes is helping our start-up cohorts to be more clear-eyed about what problems they’re solving.

Meanwhile, our Supplier Specialist Guidance team works hard to identify instances in which organisations operating outside of the established telecoms ecosystem can be brought into the fold. Quantum technologies, photonics, AI and more will all have a transformative role to play in our industry in the coming years, but more still needs to be done to firm up those connections.

Which is why some of our recent success stories are all the more heartening to share, coming as they do from founders who, in many cases, have been early engagers with UKTIN — and are reaping the rewards of growth, funding, and greater industry recognition already.

Ian Smith, Head of UKTIN

FOR BANDARLOG.DEV, UKTIN HAS OFFERED A WINDOW TO THE UK TELECOMS SECTOR



Among the inaugural cohort of UKTIN’s Investment and Innovation Support programme, Bandarlog.dev solo founder Poonam Parihar has, with UKTIN’s help, been able to both forge a better understanding of the UK telecoms landscape and raise the profile of her start-up within the UK market. As a non-UK business founder, these insights have been vital.

“The past year, and being part of UKTIN, has played a crucial role in helping me introduce who I am and what I do to the UK ecosystem,” Poonam says.

“BANDARLOG.DEV’S STORY ILLUSTRATES EXACTLY THE KIND OF A-Z SUPPORT UKTIN OFFERS”

This has included exhibiting at UKTIN’s AI conference in February, and featuring in our network’s pre-MWC report. Behind the

scenes, Poonam has been in regular contact with the Supplier Specialist Guidance team, who have been able to coach her to a clearer understanding of DSIT’s strategic goals within the broader telecoms sector.

The coming year, Poonam hopes, will bring more opportunities for collaboration and partnership forming — which UKTIN’s Clusters Group has already been helping to facilitate. Bandarlog.dev’s story illustrates exactly the kind of A-Z support that UKTIN exists to be able to offer.

A GROWING TEAM, AND CLEAR COMMERCIAL GOALS FOR WAVE PHOTONICS



Wave Photonics is one of a growing number of success stories from our Commercialisation Through Partnerships strand of UKTIN support.

Having completed the course, and followed up with multiple engagements with the Supplier Specialist Guidance team, the Cambridge-based start-up has gone on to grow its team and plot out new partnerships and collaborative projects.

This support has been vital in tackling what is, perhaps, the company's biggest challenge: the notoriously long and costly journey of taking

a photonic integrated circuit from concept to mass production.

In the months since joining the programme, the Wave Photonics team has grown by four members, to a team of 15. Crucial among these new hires has been the addition of a Head of Business Development — a role borne directly from what CEO James Lee and his team learned from the Commercialisation Through Partnerships sessions. Along with the other new starters (a Quantum Lead, Full Stack Developer, and Scientific Simulation Engineer) there are plans to add a Business Development Manager in the near future.

Jamie and co have learned to look beyond their own walls. “No company developing a new technology for telecoms has the

capability to do everything in-house, especially a small start-up,” Jamie says. “So commercialisation requires partnership.”

Off the back of the Commercialisation Through Partnerships programme, Wave Photonics has established a new collaborative project of its own, with the team working alongside several partners to explore photonic integrated circuits in quantum networks. “The UKTIN support helped highlight the importance of thinking clearly about partnerships and provided tools to help determine which issues to consider when forming the partnership agreement,” says Jamie.

Above all, UKTIN has given Wave Photonics the confidence to take these steps — steps towards a successful future.

AQUARK TECHNOLOGIES – SHAPING FUNDRAISING PLANS



A spin-out of the University of Southampton, the quantum portability and miniaturisation specialists at Aquark Technologies have recently closed a €5m seed funding round led by the NATO Innovation Fund (NIF). It's a significant sum, and one which will see the start-up accelerate into its next stages of development.

“THE SUPPORT FROM UKTIN EARLIER THIS YEAR COULDN'T HAVE COME AT A BETTER TIME AS WE PREPARE FOR MORE GROWTH.”

Aquark's core product offering — the team is aiming to build the world's most compact cold atom trap capable of operating at low power — is not one that would immediately be associated with the telecoms industry.

But engagements with UKTIN have both helped the company recognise telecoms as a key industry within its roadmap to commercialisation, and, by association, validate its fundraising and commercial development plans in the telco sector. Co-founder and COO Alexander Jantzen says that “the support from UKTIN earlier this year couldn't have come at a better time as we prepare for more growth.”

Which is, in turn, about as strong a validation of UKTIN's work as we could hope for.

Scan to find out more how UKTIN can support you: 





GOVERNMENT UPDATE

HORIZON EUROPE

The UK has an ambition to fully leverage the economic and productivity benefits of advanced 5G technologies, and the development of 6G and Future Telecoms. Future telecoms, including 6G and other emerging technologies, will be foundational to communications and has been identified as a critical technology. The UK already has an excellent research and innovation base in future telecoms technologies, but we recognise the vital importance of collaborating on a global stage with like-minded partners. We acknowledge that future telecoms research and development is a global challenge which requires global solutions. We aim to work with international partners to shape and stimulate the global market, to encourage greater opportunities for both 6G development and vendor diversification. One such way we can support UK collaboration with European counterparts is through the Horizon Europe programme.

Domestically, we have a broad range of funding programmes currently focusing on the development of 6G. These funding programmes include a package of measures announced in April 2023 to drive the deployment and adoption of fixed and wireless networks, and to invest in the next generation of connectivity. This includes £40 million that provides funding for three Future Telecoms Research hubs, led by Imperial College London, and the Universities of Oxford and Cambridge. The hubs bring together multiple universities and institutions around the country to conduct early-stage research into cutting-edge future telecoms technologies.

The work is coordinated by UK Research and Innovation (UKRI) and the Engineering and Physical Sciences Research Council (EPSRC). These operate alongside a dedicated national infrastructure for future telecoms testing and development linked to the UK National Dark Fibre Facility.

The hubs are:

- Platform Driving The Ultimate Connectivity (TITAN), led by the University of Cambridge
- Hub in All-Spectrum Connectivity (HASC), led by the University of Oxford
- Communications Hub for Empowering Distributed Cloud Computing Applications and Research (CHEDDAR), led by Imperial College London
- Joint Open Infrastructure for Networks Research (JOINER), led by University of Bristol

The hubs draw together the existing portfolio of EPSRC investments in telecoms-related areas into a coordinated approach and provide the foundation for spinout companies and attract further industry investment in the UK's world-leading research base.

In the future telecoms space within Horizon Europe, the Smart Networks Systems Joint Undertaking's (SNS JU) Research and Innovation Work Programme for 2024 was announced on the 23 of November 2023. This call provided €129 million of EU and associated members funding to advance 6G research in Europe, as well as to pilot infrastructure capabilities in 6G.

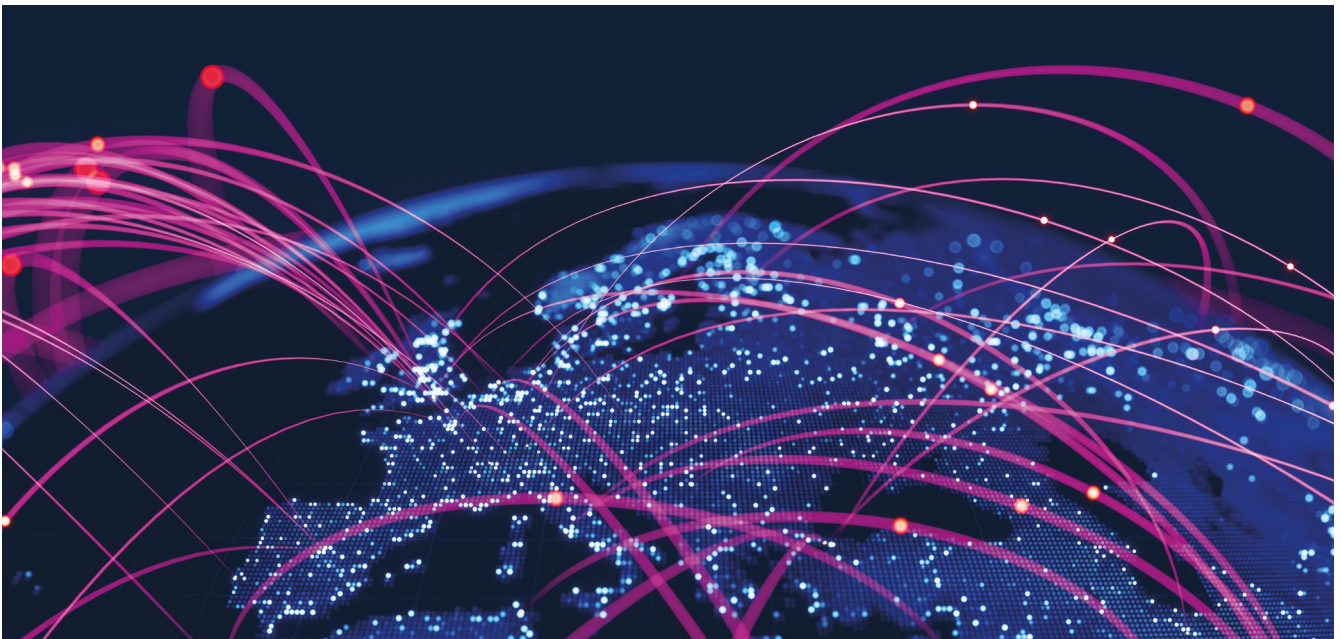
As 2024 was the UK's first year of participation post re-association, there are several successes to celebrate across SNS JU calls. Firstly, the UK ranked fourth in terms of overall engagement in the programme, showing that there is a real interest amongst UK organisations in engaging with Horizon Europe. Secondly, the UK's average success rate amongst associated countries was higher than the average, and the UK is represented across several successful projects. Having UK representation across these projects is an important step in continuing global collaboration on 6G developments and challenges.

Boosting UK participation in the Horizon Europe programme is a key goal for the Department of Science, Innovation, and Technology (DSIT). The department aims to support and promote Horizon Europe to UK industry through means such as events and roadshows.

The UK's 6G vision focuses on the following desired outcomes:

- Digital access: including through the provision of mobile coverage in hard-to-reach areas
- Open, secure, and resilient networks
- Spectrum utilisation
- Network of networks
- Sustainability
- 6G development process – continuous evolution

Events are organised by the European Programmes, Participation Strategy & Horizon Guarantee Team within DSIT which exists to support Horizon EU to industry, as well as UKTIN. These events aim to raise awareness of the Horizon programme and provide a general overview of the programme and application process and can include support on how organisations can formulate a successful bid and how to build a strong consortium.



International engagement in telecommunications is crucial for unlocking the full potential of advanced 5G and 6G technologies, fostering innovation, and driving global economic growth. By collaborating with international partners and participating in initiatives like Horizon Europe, the UK is enhancing its digital infrastructure and paving the way for cutting-edge connectivity. Discover how these initiatives and others are revolutionising connectivity across the UK, boosting productivity, and supporting public services by visiting the DSIT hub on UKTIN.





Over 6,500 people are already part of the UK Telecoms Innovation Network

Join our inclusive and collaborative forum
for the UK telecoms innovation ecosystem,
bringing together industry, government,
and academia to catalyse R&D investment,
cooperation, and commercialisation

Sign up today at uktin.net

