UKTIN

SERVING THE TELECOMS INNOVATOR

EVENTS

WHAT'S HAPPENING?

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

UPCOMING UKTIN EVENTS

1 FEB	UNLEASHING AI IN TELECOMS	LONDON
20 FEB	INVESTMENT WORKOUT	ONLINE
20 FEB	NAVIGATING THE UK TELECOMS ECOSYSTEM AHEAD OF MWC	ONLINE
19 MAR	INNOVATION WORKOUT	BRISTOL
20 MAR	EXPLORING SECURITY IN TELECOMS	DORSET
21 MAR	INVESTOR BRIEFING	BRISTOL
10-17 APR	STANDARDS IP SEMINAR	BRISTOL
16 APR	INVESTMENT WORKOUT	ONLINE

OTHER EVENTS

21-22 FEB	TOP 2024	LONDON
4-9 MAR	NATIONAL CAREERS WEEK	NATIONAL
6-7 MAR	LONDON TECH SHOW	LONDON
26-29 FEB	MOBILE WORLD CONGRESS 2024	BARCELONA

Review all the details of upcoming telecoms events here →

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HELPING UK INNOVATORS, BENEFITING THE GLOBAL TELECOMS INDUSTRY

Nick Johnson, Head of UKTIN

We're now a year into the UKTIN journey. I remember coming to MWC last year, two weeks into the job, and presenting UKTIN to a packed audience in the UK Pavilion. There were moments where I felt a little like a rabbit in the headlights.

Come 2024 and the headlights are still on, but now we're in the driver's seat. All our services are up and running and the numbers are coming in.

"WE'VE MADE A DIFFERENCE TO HUNDREDS OF BUSINESSES AROUND THE UK - HELPING THEM GET READY TO SCALE, TO TAKE INVESTMENT, TO WIN GOVERNMENT SUPPORT, TO FIND THEIR WAY AROUND THE LANDSCAPE."

We've made a difference to hundreds of businesses around the UK - helping them get ready to scale, to take investment, to win government support, to find their way around the landscape, to signpost telecoms as a great career path, and to spread best practice in terms of adoption. In short, we've helped UK innovators innovate to the benefit of the global telecoms industry: fixed, mobile and non-terrestrial.

And as someone wise once said, it's a game of two halves. We can play out this year, let the numbers grow and take the easy result. If we take that path, however, we will have missed a massive opportunity.

We have established a set of working groups, processes, structures and wide-ranging participation that has surprised even us. We have an ecosystem of over 300 people at the top of their game in telecoms. But now we have a challenge ahead of us. We have created something new: in terms of participation, alignment, turning around investor sentiment, and informing government with the evidence and recommendations they need to make the right policy decisions for our industry. That body of work is unparalleled, and if we agree its value is high, we should strive to see it live on.

We could just repeat ourselves in 2024 and cruise home, but that's not what we're going to do. Paraphrasing another wise person, we choose to do the other thing. Not because it's easy, but because it's hard; because that goal will serve to organise and measure the best of our energies and skills; because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one we intend to win.

INDUSTRY NEWS

from across the sector

TELCOS ARE LEADING THE WAY WHEN IT COMES TO AI PREPAREDNESS
And the UK government is moving in step

Just 14% of global companies are prepared for the arrival of AI, according to a benchmark report conducted by Cisco. But the telecoms industry is, at least, a few strides ahead. A separate survey conducted by TelecomTV found a majority of telecoms companies have an AI strategy in place, and that more than half believe generative AI (or GenAI) will provide a sales boost within the next two years.

"A MAJORITY OF TELECOMS COMPANIES HAVE AN AI STRATEGY IN PLACE"

The use of large language models has emerged over the last 12 months as a leading application of GenAI, with early successful deployments of the technology being made in customer service scenarios.

And big players in the telco space are already making substantial strides. Nokia Bell Labs has unveiled a Natural-Language Networking solution, which enables operators to reconfigure networks swiftly through simple speech or text prompts. Meanwhile, BT is piloting an innovative AI patient concierge service for the NHS, showcasing the diverse applications of AI in real-world scenarios.

The UK government is moving in step with these developments too, hosting a first global AI summit in November — a clear sign that the UK seeks to continue to position itself at the forefront of this burgeoning field.

Read the latest AI news here:

INNOVATORS GATHER IN BRISTOL, WITH ALL TALK FIRMLY ON THE FUTURE OF OPEN NETWORKS
Challenge winners, coffee, and collaboration

In a pace-setting convergence of telecoms innovation, the three winners of last year's Future Open Networks Research Challenge —REASON, TUDOR, and YO-RAN — gathered in Bristol in November to exhibit and deliberate on their collective contributions to the future of the sector. The event featured project presentations followed by dynamic roundtable discussions involving representatives from each project.

Discussions delved into three pivotal areas: exploring emerging hardware and software technologies, with a keen focus on sustainability and security challenges; addressing the impact of IP, standards, and the long-term implications of the projects; and identifying existing and future opportunities for collaboration, encompassing joint experimentation and the utilisation of shared facilities.

The collaborative spirit of the event highlighted the UK's commitment to collectively addressing complex challenges, fostering impactful outcomes that extend beyond the scope of each individual project.

For a comprehensive write-up of the event, including further insights from the day's attendees, head to

A QUANTUM LEAP FOR MANKIND? SAFETY FIRST, SAYS THE GSMA

As talk around quantum technology hots up, the GSMA has issued guidelines on how telcos should be readying their networks

According to the GSMA telcos should be preparing for the quantum near-future by, at a minimum: establishing a cryptographic inventory to understand where cryptographic algorithms are used in systems and third-party products; conducting cryptography risk assessments to identify the most at-risk data and systems; appointing dedicated expert teams to track and respond to new developments (and risks) arising within the quantum space; and developing a quantum-safe cryptography transition plan.

The new guidelines follow last autumn's announcement by the GSMA of its Post-Quantum Telco Network Taskforce, which included IBM and Vodafone as founding members and a stated aim to help define policy, regulation and operator business processes for the enhanced protection of telecommunications in a future of advanced quantum computing.

Amid these proactive measures, there are signs of operators already gearing up for the quantum era. Orange has undertaken testing of quantum key distribution, and Vodafone has completed its own tests of a quantum-safe VPN, using modified smartphones as end-user devices. These developments follow BT and Toshiba's trials in 2022 of a commercial quantum secured network, while SKT has pushed for the development of international standards for quantum-safe communication. September of last year also saw Toshiba opening a dedicated quantum computing lab in Cambridge signalling a local commitment to quantum advancements.

For more on the GSMA's new guidelines, and how UKTIN members are responding, head here: ⟶

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

New connections:

Cisco snapped up Splunk in the network giant's largest ever acquisition; two became OneWeb, after Eutelstat's shareholders approved a move to merge the geostationary satellite business with OneWeb's low-earth orbit constellation; and TalkTalk split three ways (TalkTalkTalk?), forming new separate entities — business-to-business wholesale telecoms services, consumer broadband, and small business.

Winter chills:

Following a Q2 slump, Nokia announced a raft of cost-cutting measures, including plans to axe between 9,000 and 14,000 jobs by the end of 2026. Ericsson, too, continued a downward skid, recording a net loss of $2.8 billion in its Q3 reporting. Both telcos have cited tumbling demands in North America for their current struggles.

Green shoots:

5G connections are on track to hit 8 billion globally by 2028, according to new data from Omdia, and smartphone manufacturers are eyeing a return to growth as a ninth consecutive quarter of YoY declines shows signs of levelling out (with more positive signs coming from Qualcomm's latest financial results).

Regulators pump the brakes:

Following an initial probe, Ofcom has referred the UK cloud services market — currently dominated by Amazon and Microsoft — to the Competition and Markets Authority. Elsewhere, planned auctions for mmWave spectrum will have to wait until Q3 of 2024 at the earliest, while the CMA takes a closer look at the proposed merger of the UK arms of Vodafone and 3.

Visit the UKTIN website for the latest news from across the sector.

UKTIN NEWS

UKTIN FOSTERS SECTOR-SPECIFIC CONNECTIVITY OPPORTUNITIES

How to make the most of digitalisation – wherever you are

Five new working groups — representing agriculture, health and social care, manufacturing, regions, and transport and logistics — have been established as the latest step in the ongoing development of UKTIN's Adoption programme.

Established in the summer of 2023, the Adoption programme is designed to provide practical, sector-specific guidance on how places and industries across the UK can best access the benefits of digitalisation, including 5G.

Each of the five new specialist working groups brings together leading lights from both the demand and supply side of the ecosystem to advise UKTIN on how best to identify and overcome barriers to facilitate broadscale adoption.

Throughout 2024, the programme will focus on developing toolkits for these key sectors, offering practical, actionable advice on everything from building business cases to selecting suppliers.

A dedicated section on the UKTIN website is now live, with pages offering tailored guidance for those working in our key verticals.

For more, head to ⟶

MEET THE UKTIN STANDARD BEARERS

Realising the value of international standards making

UKTIN is on a mission to show how international standards making is valuable to all - no matter your business size. There's no doubt it's a long haul, and apparently expensive. One commentator estimated it cost £1m to get a single piece of Intellectual Property (IP) adopted into a standard. Sounds a lot, doesn't it? But take a moment to think how much a piece of Standards Essential IP is worth to your company valuation. It's a big multiple of £1m.

"SUPPORTING SMES THROUGH THE COMPLEX WEB OF TECHNICAL STANDARDS"

In the autumn, we launched a new Standards programme with the aim of supporting SMEs through the complex web of technical standards that serve as a foundation for the telecoms industry.
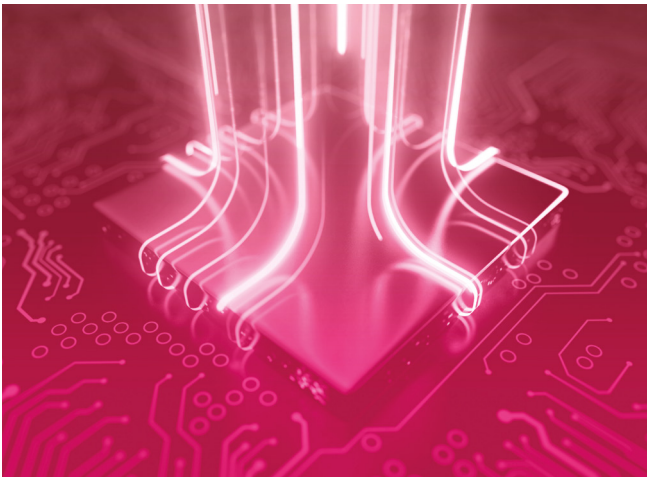
The freshly-minted UKTIN Standards Working Group has been tasked with helping early stage companies work together to get their relevant IP accepted into a standard.

The wider programme looks to support SMEs at two key stages: learning more about the intricate standards system, and practical help in navigating the journey. A regular seminar series provides the learning, with the first seminars held in January setting the stage for further sessions scheduled throughout 2024.

The navigating bit is done through a series of workshops interlocked with Standards Meetings where SMEs can find common ground in forming the alliances they need to get their IP on the agenda and ultimately into the standard.

Whether you're involved in fixed, mobile or non-terrestrial telecoms innovation, sign up for future seminars and workshops here: ⟶

UKTIN MARKET INSIGHT REPORTS SHOW STATE OF PLAY IN AI, SEMICONDUCTORS, AND MORE

Bringing together the best of industry and academia

The new year has arrived accompanied by a significant new strand of work within UKTIN. Namely, a series of market insight reports offering up-to-date snapshots of key strands within the telecoms space.

As the fragmented telecoms landscape continues to evolve, these market insights reports will do the hard work for readers: offering a curated selection of publicly available data and insights, and a real-time snapshot of significant areas within the space.

AI is the first subject under the microscope, with industrial and academic viewpoints presented in February's inaugural report. Future market reports will cover non-terrestrial networking, semiconductors, wireless, core technologies, security and optical, and are designed to complement the more heavily technical future capability papers being produced by UKTIN's Expert Working Groups (which themselves will take more of a future look, offering subjective opinion and recommendations).

The market insight reports are a product of a dedicated service within UKTIN which surfaces and highlights relevant public research from the spheres of both industry and academia. A dedicated tool linked with this service is also in the works, to be made more widely available in the coming months.

Access the market insight reports here:

INVESTOR BREAKFAST IS SERVED

Smart innovators, savvy investors, eggs sunny side up

While some investors might see telecoms as an uninviting bid — or at least one that doesn't offer as swift a return as software — the same cannot be said for the deep tech specialists at Bloc Ventures, Liberty Global, and Capital Lab Ventures.

London-based Bloc's Chief Commercial Officer, Mike Dimelow, was on hand last October to chair the first in an expanding series of investor briefings bringing together savvy investors and top telecoms talent.

Dimelow stressed the importance to the telecoms sector of developing business models that can scale, a sentiment echoed by Simon Clement, of Liberty Global, who highlighted the telecoms "scale-up gap" and called for greater focus on bridging this divide.

UKTIN is committed to bringing together start-ups doing innovative and exciting things across telecoms (and its adjacent sectors of cyber, AI, quantum, and space) with investors who really understand these fields.

Future investor-focused events will take place on a quarterly basis over the next 12 months, connecting more potential investors and start-ups working at the sector's cutting edge. Gatherings will be organised in locations across the UK, reflecting the fact that fresh telecoms innovation can be found well beyond the industry's concentrated hubs in London and the south east.

Find out more about the briefing series here:

HARD TRUTHS AND HIGH-FIVES

SIX MONTHS IN UKTIN'S SMALL BUSINESS SUPPORT PROGRAMME

Lydia Green, UKTIN Community and R&D Advisor

UKTIN's 160-strong small business community is providing the telecoms sector with a vital new voice

It's been half a year since the launch of our dedicated UKTIN small business support programme, and we've had six months of Eureka moments, slow realisations, beliefs crystallising, and new leaps of faith being taken.

As the new year fizzes on, we're beginning to gain a clear picture of where our impact is being felt — and where we need to go next. Just like our start-ups.

We've seen early-stage companies like Bandarlog use our innovation workout sessions as a test ground to combine veteran telecoms expertise with emerging opportunities like AI and intelligent automation. Quantum Light honed its bleeding-edge semiconductor nanostructure tech to focus on a single short-term market opportunity within connected cars — a strategic spark that came directly from discussions held during the innovation workouts. Locomizer, meanwhile, is figuring out how to pivot, and made the most of face time with tech VC Mark Volanthen to ask how to navigate this sometimes tricky process with investors.

For those not yet familiar, our small business programme comprises two core streams of support: innovation, and investment — with two-day workshops tailored to each area running throughout the year. We work with a broad mix of early-stage companies. Some are pure-play telecoms outfits, while others are from different spheres but have interesting tech with potential applications within telecoms (sometimes they haven't figured that out yet).

Our innovation sessions dig into business models, value propositions, and, for some, figuring out what it is their tech is really useful for. We've recently started to spread these workouts out over a period of six weeks, following the belief that learning, and truly understanding innovation in action, is something that takes time. People need to be given space to reflect on and digest what they've been

> **"LEARNING AND TRULY UNDERSTANDING INNOVATION IN ACTION, IS SOMETHING THAT TAKES TIME"**

discussing in between these highly collaborative sessions and throughout the process (the emphasis always being on how attendees can help each other, as much as themselves).

If we treat innovation as a steady 5k, then the investment side of the programme is more akin to a run out with Usain Bolt. We keep these sessions — which aim to unpick and unpack the sometimes complex telecoms investment landscape — as compact and direct as possible, since we understand that the people who tend to sign up for them are either about to raise money or are already mid-round.

Short and sharp is of the essence. We prioritise direct contact with active investors; Q&A sessions form a key part of the workouts, and are a feast of straight talking, tough love, and the odd epiphany.

As the programme develops over the next 12 months, we'll introduce more blended learning options: we understand that it's a lot to ask of a busy small business owner to give up a full day, and that those with childcare or other commitments might prefer to dial in remotely, join an evening session, or learn in their own time.

Signposting where our cohorts can head next, and fuelling that journey, is just as important as the initial workouts. We're able

to connect participating start-ups with telecoms veterans, investors, and scale-up mentors, as well as plugging in to the wider UKTIN network. Former workout attendees have gone to work directly with partners at Digital Catapult and the Satellite Applications Catapult. Our Specialist Supplier Guidance service is there to connect dots, and the Clusters programme provides a vital service both in

introducing new small business talent to their collaborative sessions, and promoting our work.

Sometimes the biggest impact is the hardest to measure. The most consistent feedback we receive from workout participants is not about the problems they solved or the money they raised as a result: it's about the people they met along the way.

Running a start-up can be an incredibly isolating experience, and a journey riddled with self-doubt. In this light, the communities that sprout from our workout cohorts have taken on an irreplaceable new value when it comes to building confidence, good-spirited

competition, or just providing a sounding board that isn't all that accessible most of the time.

"WE'RE ABLE TO CONNECT PARTICIPATING START-UPS WITH TELECOMS VETERANS, INVESTORS, AND SCALE-UP MENTORS"

Our online hub now totals more than 160 companies, all bringing their own commentaries, concerns, and connections. It's where conversations continue, and new ideas grow.

In some ways, it's a microcosm of UKTIN itself.

As 2024 draws on, we'll be seeking ways to aggregate this powerful voice — and put it in the rooms where we can make a difference. We're already seeing the seeds of this potential, collating our community members' experiences and taking them to standards bodies, key funders, and policymakers. We're also able to give feedback to others developing business support platforms elsewhere in the UK and further afield — so they can learn, directly from our members, what's worked and what hasn't.

Ultimately, we're all in the business of connecting things — and connecting people. Because when those connections are made, things start to happen.

Workshops are valued at £6,000 each. Attendance is fully funded by UKTIN.

Find out more about UKTIN's small business support programme, and sign up for workshops at

GUIDE TO FUNDING AND OPPORTUNITIES

The Digital Infrastructure (DI) directorate in DSIT will shortly publish a guide to its research, development and innovation current funding and opportunities

As many readers will be aware, DSIT sets policies to promote investment, protect national security, grow the UK telecoms ecosystem, and run innovative programmes for the next generation of telecoms technology.

To advance and inform the UK's policy ambitions in this space, DSIT intervenes directly by sponsoring research development and innovation (RDI) and developing new facilities with industry, academia and public sector partners. These large, complex interventions are run by an integrated Future Network Programmes team, with some interventions additionally delivered through Innovate UK and EPSRC.

"RDI IS VITAL IN ENHANCING DIGITAL INFRASTRUCTURE IN THE UK"

Research, Development, and Innovation (RDI) is vital in enhancing digital infrastructure in the UK. This is why **the UK government has invested £500m** in the last three years into telecoms-related RDI programmes.

RDI fosters technological advancement, allowing for the creation of more efficient, secure, and accessible digital networks. This enables the development of faster internet speeds, improved connectivity, and the implementation of cutting-edge technologies like 5G.

It drives economic growth by creating opportunities for new industries and jobs. It attracts businesses, encourages entrepreneurship, and stimulates productivity across various sectors. It also positions the UK as a global leader in technology, attracting foreign investment and fostering international collaborations.

Telecoms RDI can also contribute to societal advancements, enhancing the quality of life for citizens. Improved digital infrastructure supports better healthcare systems, efficient transportation, smarter cities, and enhanced educational platforms. It facilitates access to information, services, and resources, narrowing the digital divide and ensuring inclusivity across different demographics.

The Digital Infrastructure RDI interventions supported by DSIT fall into four categories:

- Delivering better coverage, particularly to hard-to-reach areas

- Stimulating the adoption of 5G and demonstrating the benefits it can bring

- Diversifying the supplier base in the 5G Radio Access Network to boost the resilience of our networks

- Building the UK's capability to shape the next generation of communications networks

RDI in digital infrastructure in the UK is essential for ensuring the country remains competitive and resilient in an increasingly digital world.

Furthermore, the UK's reassociation with Horizon Europe means the UK telecoms R&D ecosystem has access to the £80 billion Horizon funds again, strengthening UK innovation even more.

To read more about the Research, Development and Innovation programmes supported by the DI Directorate within DSIT, scan here

INTRODUCING THE 5G INNOVATION REGIONS

You may have seen that DSIT recently announced the ten successful 5G Innovation Regions (5GIRs)

Over £36 million has been awarded to regions across all four nations of the UK. These successful regions will lead in delivering the Government's vision for communities across the UK to take full advantage of the transformative effect that advanced wireless connectivity and digital technologies can provide - part of Government's wider ambition to drive telecoms innovation, ensuring more secure and resilient networks and a more diverse and competitive supply chain.

Image: NASA

Ayrshire Growth Deal Region
The Ayrshire 5G Innovation Region

Belfast City Region
The Belfast 5G Innovation Region

Borderlands Partnership
The Borderlands 5G Innovation Region

Glasgow City Region
The Glasgow 5G Innovation Region

Greater Manchester Combined Authority
The Greater Manchester 5G SMART Decarbonisation Network (GM 5G SDN)

North East Combined Authority
The North East 5G Innovation Region

Oxfordshire County Council (Oxfordshire, Berkshire, Buckinghamshire, Bedfordshire, Cambridgeshire)
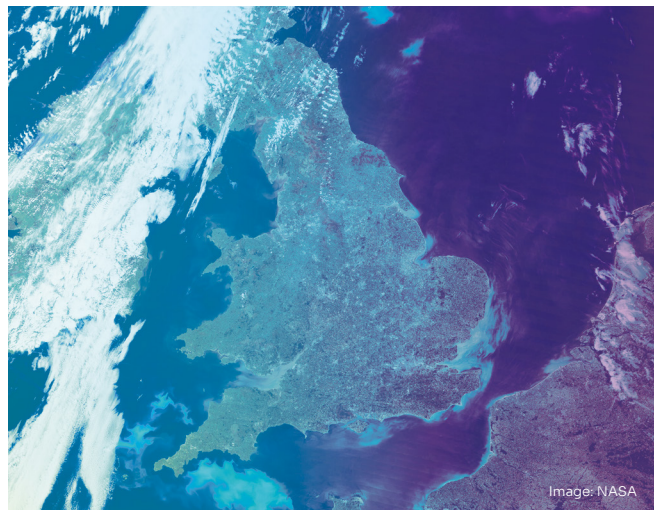England's Connected Heartland (ECH)

River Severn Partnership
The River Severn Partnership Advanced Wireless Innovation Region

Sussex (East and West)
The Growing Sussex 5G Innovation Region

West Midlands Combined Authority
The West Midlands 5G Innovation Region

The winners represent a diverse portfolio of regions across the UK with **different geographic, sectoral and technological challenges and solutions**. The chosen regions will deliver a range of exciting project applications across a range of key sectors across the UK. From 5G-enabled farming in Sunderland to '5G in-a-box' location filming in Belfast to the creation of 5G Science Parks in Oxfordshire.

The programme aims to drive innovative applications powered by 5G from proof of concept to widespread adoption. Innovation regions will demonstrate and adopt 5G and other advanced wireless use cases across key sectors of the economy. They will also demonstrate the scalability, replicability, and sustainability of use cases, and disseminate project learnings and benefits.

5G can transform our public services and grow the economy, making our factories and workplaces more productive and creating better-paid jobs.

The evidence is clear that the most significant economic benefits from 5G will come from widespread adoption of advanced 5G by industrial sectors, including manufacturing and logistics, and by public services.

For full information on the various adoption projects scan here: ⟶

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UKTIN

Over 6,000 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