

Telecoms Action Plan

A techUK policy stocktake for
the next government

June 2024

Exploring the Potential of Future Telecoms



Executive Summary

To hit the ground running, the next government should implement these telecoms industry action points as gathered by techUK. We have surveyed members and determined what has worked well since 2019, what hasn't, and crucially – what needs to be done.

We recognise the success of the policy framework that has delivered full fibre to over 62% of UK premises¹ – this is a UK infrastructure story to be proud of. It is important to reflect on this success as it has occurred in the face of unprecedented challenges including the pandemic, geopolitical tensions, inflationary pressure, and the cost-of-living crisis.

We also recognise the shifting market dynamics impacting the public mobile network operators in the coming years including rapid technological change, new entrants, and shifting economics, and offer simple actions to help improve the picture for advanced connectivity, including 5G.

Indoor connectivity – from neutral host provision to the advances in Wi-Fi technology – is essential to the success of our Telecoms Action Plan, and we include some suggestions here too (but it is not our main focus). We would always remind policymakers that the majority of connectivity usage is indoors.

We offer key recommendations on Barrier Busting v2.0 (deployment); take-up and adoption; and ensuring policy and regulatory certainty.

We also review the Wireless Infrastructure Strategy a year on from its publication and suggest ways forward for meaningful progress.

Introduction

The UK telecoms sector, and the digital connectivity it delivers, is vital to the prosperity of the country. A key foundation of the economy, the sector contributes £32.7 billion to the UK economy and made up 1.5% of total GVA in 2022.² Whether it's to drive forward a digitalised energy system for the UK's energy security, provide better connectivity services for the NHS or to ensure street safety through CCTV upgrades, the enabling role of telecoms demonstrates how pivotal it is in setting the UK on a secure future footing.

The rollout of full fibre broadband and wireless connectivity (including 4G, 5G and Wi-Fi), over recent years is a true UK success story. Led by significant private investment, full fibre has been delivered throughout regions of the UK, including many of the most deprived areas. Looking at full fibre broadband, Ofcom's recent analysis shows that full fibre coverage is now at 18.7 million homes (62%),³ representing an increase of 5 percentage points in the four months between September and January 2024. There is also a huge opportunity for the UK, with the UK Wireless Infrastructure Strategy suggesting widespread adoption of 5G could see £159bn in productivity benefits by 2035.⁴ Providing consumer value for money, the UK also ranks 5th out of 179 countries for mobile data affordability according to Broadband Genie's 2024 Mobile Data Affordability Index.⁵

Over recent years, the sector has experienced shifting market dynamics alongside political and economic change. Ongoing stagnation in productivity and real wages, large-scale and longstanding inequalities, and the need to adapt in face of new shocks and sources of change – from the climate crisis and net zero transition to rapid technological progress – all call for a carefully considered approach. Optimal policy and regulation are therefore paramount to deliver telecoms infrastructure and digital connectivity to all regions of the UK. Indeed, investing in costly next generation infrastructure is possible but policymakers and operators must strike a balance between increasing demand from customers and ensuring services remain affordable given the cost-of-living crisis.

The ambition to deliver gigabit-capable broadband to 85% of UK premises by 2025 and nationwide gigabit connectivity by 2030⁶, coupled with 5G standalone coverage for all populated areas by the same year, encapsulates a vision for the UK to become a world leader in digital connectivity. But the next government must embrace the future, as ambitions for digital connectivity cannot stop here. At the heart of success lies a focus on uptake and adoption, made possible through the right targeted public sector investment and unleashing private sector investment.



If the UK is to truly establish itself as a leading tech economy and remain a front runner in the global race to leverage emerging technologies, including AI, the government must harness the strength of the UK telecoms sector. Robust digital infrastructure, including telecommunications infrastructure, is a vital pillar that enables a vibrant, resilient, and growing digital economy to be built. It marks a key foundation of all the digital services, internet tools, connectivity, and cloud computing applications essential for a digital economy.

Across the UK, consumers also demand world-class connectivity inside office buildings, venues, retail centres, and transportation hubs – with an expectation that mobile coverage will simply be there. Delivery of the infrastructure and solutions to enable the 4G, 5G and Wi-Fi public mobile signals into buildings is required to keep up with growing consumer demands. techUK recognise that developments in Wi-Fi technology, including Wi-Fi 7 expected to launch in 2024/5, play a role in enhancing indoor connectivity. As well as this, smart products rely on strong wireless connection to stream, work and survive – further showcasing the need for reliable indoor connectivity. Demonstrating the rise in demand, techUK's State of the Connected Home 2023 report⁷ found 4 in 5 consumers own at least one smart home product, and a third own more than 3.

In this document, techUK provides a Telecoms Action Plan for the next government. We have carried out a stocktake of policy and regulation as we mark a year on from the UK Wireless Infrastructure Strategy, with a scorecard and RAG rating system demonstrating the state of delivery so far. We bring together insight for proposed recommendations that the next government can deliver on their first day of office. This also comes ahead of the regulator Ofcom's Telecoms Access Review 2026⁸ to follow the Wholesale Fixed Telecoms Market Review 2021-2026⁹, and further government work to be carried out pre-election that is not currently public. While industry has made good progress since 2019, up until 2024, there is more to be done.

We welcome the opportunity to inform the next government's approach and bring forward current initiatives, along with shaping future policy direction. We also review the Wireless Infrastructure Strategy a year on from its publication and suggest ways forward for meaningful progress.

Key recommendations

Ahead of a general election, all political parties should acknowledge and address the significant policy gaps preventing the UK from delivering rollout and uptake of digital infrastructure and advanced connectivity. Immediately, the UK government could boost the economy by driving future-facing telecoms uptake and investment by:

1.

Enabling digital infrastructure to be built more quickly with wide-reaching benefits for everyone across the UK. Do this by:

- Optimising the planning system to be fit for the delivery of telecoms infrastructure.
- Ensuring the tax system incentivises further investment.
- Provision for future spectrum management and a future skills pipeline.

2.

Improving telecoms networks economics to deliver full fibre and 5G ambitions. Do this by:

- Initiate a Future Connectivity Strategy post 2025 Spending Review to support industry on delivery and uptake of future facing digital infrastructure and connectivity.
- Prioritise progressing policies held up at consultation stage by confirming them as soon as possible.

3.

Maintaining healthy competition and economic security through the right regulation. Do this by:

- Providing longer term certainty and hold the regulator to account in delivering economic benefits for the UK, sending the right signals to industry and drive forward investment.

techUK makes the following recommendations to capitalise on the rollout and uptake of telecoms infrastructure that will deliver the future connectivity underpinning the UK economy:

Theme	Recommendation
Rollout: Enabling digital infrastructure to be built more quickly with wide-reaching benefits for everyone across the UK.	Within the first 12 months... • A government planning regime that genuinely supports the emerging mobile and fixed infrastructure requirements of the future, including network densification and accelerated deployment models. • Telecoms remains ambiguous in UK Planning Reform. The National Planning Policy Framework (revised December 2023)¹⁰ marks a step in the right direction by outlining the use of existing infrastructure and this should be encouraged. • Optimise resourcing and efficiency in the planning system, including in local planning authorities to enable timely decision-making for current and future planning applications. • For efficiency in planning departments, this includes guaranteed timescales for outcome, clear guidance and rules interpreted in a uniform way by Local Planning Authorities. • A tax system to incentivise further investment in productivity enhancing infrastructure. For instance, reviewing the R&D tax credit and business rates system. • Business rates relief for new and/or upgraded infrastructure, with rates set in line with new ECC rental levels. • Confirm and codify a di-minimis approach to small cells/network densification. • Enable telecoms to innovate to meet customers' needs by outlining a long-term strategy for the R&D tax credit system, starting with a five-year plan. • Ensure a spectrum management strategy is delivered to meet the current and future demands for digital connectivity. • Reduce excessive Annual Licence Fees (ALFs) and channel these into network deployment. • Ensure there is a future spectrum release roadmap to meet projected capacity demand and enable future applications and services in both licensed and licence-exempt spectrum. • For spectrum management, implement sharing where it is beneficial and continue with market mechanisms such as trading to achieve efficient use.

Within the next Parliament...

- Secure skills fit for future telecoms needs – this will deliver innovative telecoms infrastructure and break down barriers to entry into the sector.
- Recognise the work that industry is already doing to become a more inclusive sector, ensuring further inclusion from women and those from underrepresented backgrounds, from designing more inclusive roles to promoting job profiles and career pathways.¹¹
- Consider future needs in the education system to support the sector, including in STEM subjects in schools.
- Create better collaboration between local authorities and operators by formalising the Digital Champion model, with specific funding for this.
- Raise the profile and importance of Digital Champions by creating more collaborative business model.
- Drive consistency across local authorities (LAs), with clear guidance on the requirements, seniority, and role of Digital Champions. Consider options to mandate this (similar to DPO, Caldicott Guardian, Section 151 etc).¹² and empower Digital Champions to change operational LA processes to enable telecoms deployment.
- Leverage the role of the Digital Infrastructure Advisory Group¹³ to support digital connectivity ambitions and adoption at a local level. For instance, leading on targeted campaigns in collaboration with LAs to boost adoption of fixed fibre and 5G across customers (consumers and businesses).

Take up:

Improving telecoms network economics to deliver full fibre and 5G ambitions.

Within the first 12 months...

- Initiate a Future Connectivity Strategy post 2025 Spending Review to support industry on delivery and take-up of future-facing digital infrastructure and connectivity:
 - Focus on realising the long term economic and social gains that will be delivered through continued investment and cover fibre broadband, public 5G, private networks, future telecoms R&D and academia engagement.
 - Recognising the telecoms sector is part of the wider digital infrastructure ecosystem (data centres, cloud etc), this overarching strategy should focus on pro-competition interventions to support the continued roll out, increase quality of service, and deliver greater value.
 - Within this, the government embed a horizon scanning function of the rapidly changing market and landscape, for instance, looking at the changing role of Fixed Wireless Access and Non-Terrestrial Networks, along with the convergence of fixed and wireless networks.

- Redouble efforts to introduce the flexi permits regime so that it can be activated at the earliest opportunity, this includes pilots across LAs.
 - The Department for Transport and DSIT should implement the set of flexi permit trials, enabling more homes and businesses to be connected.
 - Flexi permits also facilitate the delivery of important infrastructure on a larger scale while allowing authorities to play an oversight role. They also enable multiple streets to be permitted at once, cutting processing time for LAs and reducing permitting requirements as much as 90%.¹⁴
- Anchor next generation spending. Use government digitisation to drive revenue and new use cases into 5G and advanced communications networks.
 - Take a regional perspective to delivery, focusing on areas that are under-delivering. techUK's Local Digital Index (LDI)¹⁵ ranks UK regions on their delivery of digital infrastructure and connectivity and represents a useful tool for the government to identify where investment should be directed.
 - Build on the 5G Innovations Regions,¹⁶ using the model for the most deprived areas of the UK.
 - Continue delivery of Project Gigabit subsidy programme, and remit to focus on take-up and adoption of full fibre/Wi-Fi and 5G.
 - Present viable options to address gigabit capable coverage for Very Hard to Reach premises, which was first consulted on in 2021.

Within the next Parliament...

- Government must identify further public sector use cases for 5G and fibre solutions to boost the transition to a digital-first government, unlock smarter procurement; and encourage take-up across the private sector:
 - Set up a Public Sector Future Telecoms Taskforce. Bring together DSIT teams across wireless and fixed, and focused on how public services like the NHS, the police, or local authorities can utilise advanced connectivity and the services it supports.
 - Campaign to promote public sector use cases for 5G and fibre solutions to boost the transition to a digital first government, and to unlock smarter procurement.

	• Incentivise investment and entrepreneurship within the sector by maintaining Seed Enterprise Investment Scheme (SEIS), Enterprise Investment Scheme (EIS) and Venture Capital Trusts (VCTs). • Leverage existing investment vehicles, making greater use of institutions including the British Business Bank and UK Infrastructure Bank to incentivise entrepreneurship and innovation in the sector: • The UK Infrastructure Bank's five priority sectors includes digital infrastructure. A clearer framework is required to identify finance gaps in new and growing infrastructure business models and consider investment opportunities.¹⁷ For example, UKIB announced a £240 million debt guarantee to support the continued expansion of Gigaclear's rural fibre broadband network. • Within the British Business Bank's remit for the future, include a focus on delivering digital infrastructure. techUK member ITS Technology Group secured funding from funds managed by Maven Capital Partners to support the growth of its full fibre digital infrastructure in metro and rural areas.
Getting the right operating environment: maintaining healthy competition and economic security through the right regulation	Within the first 12 months... • The Government should establish a model for the regulator to work with industry in the future: • techUK members have outlined how the Wholesale Fixed Telecoms Market Review (WFTMR) and Statement of Strategic Priorities (SSP) model work well in giving the regulator steer from the government and providing longer term certainty for operators. However, members note that more could be done to hold Ofcom to account on delivery of their work programme. Within the next Parliament... • Leverage Ofcom's growth duty for the sector to help drive productivity, and help businesses navigate the connectivity market.¹⁸ • Embed climate resilience and the net zero transition into all future regulatory development, understanding where delivering in wider infrastructure has positive knock-on impacts (and vice-versa): • Take on board the National Infrastructure Commissions' recommendation and identify the specific telecoms needs of the energy, water and transport sectors and ensure that infrastructure is delivered to meet these by 2030/2035.¹⁹

Spotlight on techUK event:

Delivering electric vehicle infrastructure and the lessons learnt from the telecoms sector

techUK explored the delivery of EV infrastructure and lessons that can be learnt from the telecoms sector with experts from Connected Kerb, Zapgo, Analysys Mason, CityFibre, CSL Group and the Department for Science, Innovation and Technology.

Key points on commonalities between the deployment of EV infrastructure and telecoms infrastructure included: the benefit of clear Government ambitions; promoting further digitalisation to drive regional economic growth; and meeting climate objectives. Both industries – and their growth – are also influenced by convenience, affordability, and sustainability.

Our discussion explored how the continuous innovation seen across both industries includes enhanced user experience, improved efficiency, and increased capacity.

However, points were raised around the UK government having a well-developed framework for intervening in telecoms infrastructure deployment that is not yet apparent in the EV Infrastructure market. This was most notably seen through high level strategies including the FTIR, WIS and SSP for Ofcom.

Lessons that can be learnt for EV infrastructure include recognition of the importance of local government to drive deployment and consumer take up, a market-led approach, focus on removing barriers (i.e., Barrier Busting Taskforce for telecoms) and intervention through legislation where necessary (i.e., PIA and permitted development rights).



Spotlight on techUK

event: Digital Infrastructure Leaders – Northern Ireland

What key factors set Northern Ireland on its path to 94.2% gigabit-capable broadband coverage? techUK hosted industry leaders from Openreach, Fibrus, and Virgin Media O2, along with Building Digital UK on Project Stratum and the Shared Rural Network to understand NI's success, and the impact strong digital infrastructure could deliver, via the most recent techUK [Local Digital Index](#) 2023.

Ofcom's Connected Nations 2023 report revealed that more than nine in 10 Northern Ireland homes can access full fibre broadband, over 51,000 more than last year, and that 5G availability is gathering pace. Nearly three quarters of a million Northern Ireland homes have access to full-fibre broadband – higher than all other UK nations.

Key points around the success of Northern Ireland's digital infrastructure deployment point to significant commercial investment in fibre networks and the role of publicly funded investment through Project Stratum. On Project Stratum, contributors noted its role in helping to ensure that communities do not get left behind, with more than a third of Northern Ireland's population living within a rural area.

Another key enabler for success pointed to the direct feedback loop between the Department for Infrastructure and industry, facilitating conversations to help industry scale build programmes around current rules. Continued competition also helped drive a buoyant market that puts consumer experience at the heart of delivery.



The UK Wireless Infrastructure Strategy: Delivering One Year On?

The UK Wireless Infrastructure Strategy (WIS) marks the latest UK Government strategy for telecoms and a vision for 5G to be a cornerstone of the UK's digital economy: it provided a comprehensive view of what the UK government thinks about advanced wireless connectivity. The strategy included some funding commitments, but overall – a list of ambitions that government hopes the UK's private sector can help it achieve.

techUK, and the telecoms sector, welcomed what was set out last year. It was positive to see “advanced wireless connectivity” included alongside 5G throughout the document. techUK had also long called for a “user requirement first” approach and technology-neutrality, especially when it comes to private networks for enterprise.²⁰

The scale of the Strategy reflected the ubiquity and importance of connectivity to the UK's economy, society, public sector, and infrastructure. One year on, we are keen to understand where we are so far with the WIS and help DSIT with elements referenced throughout – from boosting the rural economy via the adoption and use of agri-tech, to improving the passenger experience on the UK's rail network and making a tangible impact on our health and social care sector.

techUK continues to work with the government and our members to ensure people and businesses can reap the benefits this Strategy comprehensively sets out.

For full fibre, the Future Telecoms Infrastructure Review (FTIR) published in 2018 ultimately set out the policy and regulatory framework for investment – and that investment followed, with £33.2 billion of investment helping to deliver 57% full fibre broadband coverage in 2023.²¹

This is a notable success story and one that should be celebrated.

techUK's *'The FTIR: Fit to deliver for 5G and full fibre four years on?'*²² report concluded that the FTIR set in place a policy framework that was highly effective. The techUK report outlined recommendations from industry to help support delivery and tackle persistent barriers to deployment, along with the recommendation to prioritise take-up and adoption. The report also helped to inform the UK Wireless Infrastructure Strategy – including advice to recognise the economies of scale in mobile and scale of investment required for 5G, take learnings from the 5G Testbeds and Trials Programme, and change in approach to consolidation and annual licence fees.

In this Telecoms Action Plan, we deliver a stocktake on what was promised within the WIS, and what has been delivered so far. We mark a red, amber, or green (RAG) rating system of red (no progress/behind delivery), amber (some progress on delivery) and green (delivered). This should help inform the next government, and the Digital Infrastructure Directorate within the Department for Science, Innovation and Technology, on what to deliver for the sector.

What was promised?	Has this been delivered?	RAG rating
--------------------	--------------------------	------------

Chapter 1 – Approach and scope

1.1	Ensuring that Ofcom continues to hold the MNOs to account by improving the accuracy of coverage reporting, particularly in rural areas and on the rail networks to help policy makers and industry understand where coverage improvements are needed.	1.1	Coverage for full fibre broadband is reported via ThinkBroadband.²³ While Connected Nations reports do include the availability of 5G services, they do not report on coverage to understand where coverage improvements are needed.²⁴ techUK members have dedicated teams drive-testing to benchmark predictions and provide accurate reporting. For instance, all four mobile network operators provide maps of their 5G coverage. Coverage maps should focus on (i) crowd sourced data and (ii) benchmarking companies. If done right, this could bring considerable benefits to consumers and industry.	
-----	---	-----	--	---

Chapter 2 – Ensuring good connectivity across rural and urban areas

2.1	Supporting the telecoms industry to deliver the ambition that all populated areas have standalone 5G by 2030 by confirming our openness to market consolidation and reducing regulatory barriers to investment and innovation by:	2.1	The right ambition was laid out to deliver standalone 5G to all populated areas by 2030, recognising the openness to market consolidation and addressing current regulatory barriers.	
2.2	Ensuring that net neutrality rules are fit for purpose and support operators' ability to innovate and invest in infrastructure.	2.2	Ofcom is responsible for monitoring and ensuring compliance with the rules and providing guidance on how ISPs should follow them. Ofcom revised guidance in October 2023 to enable ISPs to innovate and manage their networks more efficiently. ²⁵	

2.3 Asking Ofcom to review and set out a clear evidence-based and forward-looking rationale for its approach to setting spectrum fees by the end of 2023.	2.3 Ofcom last released their management cost and fees in 2016-2017. Ofcom's spectrum management strategy released 2022 outlines intention to progress in new areas of spectrum. xxvi Along with this, the Government also released a spectrum statement outlining a spectrum vision for the coming period in April 2023. ²⁷ Ofcom have set out a rationale for their approach to setting spectrum fees within their spectrum management for next generation wireless broadband. ²⁸
2.4 Maximising the UK's influence at international spectrum negotiations, with alignment of international and domestic spectrum frameworks where possible.	2.4 Ofcom has responded to the WIS in its January 2024 "Review of Ofcom's market-based approach to mobile spectrum management" ²⁹ , where it states that it retains an open mind on the best way to secure the optimal allocation of spectrum on a case-by-case basis, but did not call for any specific changes. Therefore, industry awaits meaningful progress on delivering a 'clear evidence-based and forward-looking rationale' as proposed, and, furthermore, the wider question of ALF spectrum fees versus the economic benefit of investing in network deployment has not been addressed. As Ofcom notes, "it is for Government to decide whether the receipts raised by ALFs should be used for any specific use, such as to directly promote investment in mobile networks". Ofcom continues to represent the UK's interests at the ITU and CEPT. ³⁰ In the run up to the WRC, policy positions are discussed at the UK Spectrum Board. Ofcom also engages UK stakeholders on international spectrum matters through the International Frequency Planning Group. We noted government's attendance as part of the UK delegation that contributed to the ITU-R WP5D Recommendation "Framework and overall objectives of the future development of IMT for 2030 and beyond" – a broad international consensus on 6G.
2.5 Ensuring eligible MNOs benefit from the relief available in Freeports and other economic areas with similar regimes.	2.5 Government announced an extension of Freeport tax reliefs to September 2031. It is unclear on how MNOs can benefit from relief in Freeports.



Chapter 3 – Our 2030 Ambition



3.1 Taking a new approach to supporting places to attract commercial investment in 5G networks in their areas and encouraging adoption of 5G-enabled use cases by businesses and the public sector - our £40m 5G Innovation Regions programme will help accelerate the realisation of these benefits for places across the UK, by promoting investment in and encouraging the adoption of 5G technologies and services.

3.1 The 5G Innovation Regions programme was announced on 16 November 2023. Successful regions include the likes of Belfast City Council, West Midlands Combined Authority, Greater Manchester Combined Authority, Oxfordshire County Council, Glasgow City Council.

Following techUK's Local Digital Index 2023, showcasing that other regions across the UK fall behind mobile coverage, including Wales, Northern Ireland and the South West of England, techUK reiterate the need for those regions that have not received funding from the Innovation Regions Programme to be supported to adopt standalone 5G within their region.

Chapter 4 – Strengthening the investment environment



4.1 Ensure digital connectivity requirements for future users of infrastructure are at their heart of major infrastructure projects.

4.1 The National Infrastructure Commission's Second National Infrastructure Assessment recognised the role of digital connectivity in supporting other infrastructure sectors.³¹ Recommendation 26 recognised that government must ensure the right conditions are in place to accelerate the market led deployment of 5G. Recommendation 27 recognised the need for government to identify the specific telecoms needs of the energy, water and transport sectors and ensure that infrastructure is delivered to meet these by 2030 and 2035.

techUK endorse the recommendations from the NIC as vital to enable the rollout and uptake of advanced connectivity. To ensure the enabling role of digital connectivity in future strategic ambitions of the UK, techUK calls for classifying strategic digital infrastructure as nationally significant infrastructure within the planning consent process.³²

4.2	Bring the full purchasing power of government to support public sector adoption and working with the Crown Commercial Service to drive demand for 5G use cases.	4.2	More action is needed on this, with a current lack of impetus and scale from across government departments.	
4.3	Ensure new hospitals are equipped with 5G or equivalent.	4.3	There is a lack of clarity on the new hospitals programme and rolling out of 5G and other advanced connectivity indoors. It is understood that capital investment and spending priorities in the NHS have been shifted since the release of the WIS.	
4.4	Establish a Digital Infrastructure Advisory Group to advise the government on how places can act to promote investment in and adoption of digital connectivity.	4.4	techUK welcomed the initial progress made and that the Digital Infrastructure Advisory Group was established – a platform for regions and LAs to articulate challenges, discuss opportunities for encouraging the provision of networks and services to meet demand and make policy recommendations for DSIT. Members were disappointed at the time it has taken to establish this Group, and keenly await further updates on the KPIs and latest action of this group. To help facilitate the investment and adoption of digital connectivity in the public sector this Group should include industry representation or direct feedback loop, which techUK is willing to facilitate. techUK members of the Communications Infrastructure and Services Council and wider Programme should interface with the Advisory Group. This can help establish a clear line of co-ordinated communication to highlight challenges and mutual areas of interest. techUK also calls for setting up a Public Sector Future Telecoms Taskforce. We would like to see this bring together DSIT teams across wireless and fixed, and focused on how public services like the NHS, the police, or local authorities can utilise advanced connectivity and the services it supports.	

Chapter 5 – Realising the full benefits of 5G and advanced wireless connectivity

5.1 Driving adoption in key economic sectors, undertaking a nationwide campaign to drive 5G adoption by business, working with Ofcom to continue to improve access to spectrum.

5.1 Some progress was made by the UK Government when launching a £40 million fund to spark local digital revolutions and unlock benefits across the UK in July 2023. UKTIN (funded by DSIT) now has 'Adoption' added to its original remit (of offering a front door to academia and innovative telco companies in the UK). The UKTIN website now hosts an 'Applications' hub outlining how the deployment of 5G can benefit digital transformation to the UK economy. On spectrum, the spectrum sandboxes have marked a step in enabling investment to support research into enhanced spectrum sharing in the UK.³³

techUK continues to hear from members on the need for the UK government to promote the take up and use cases for advanced connectivity. A recent report by the Digital Connectivity Forum offered crucial insights into the adoption of advanced connectivity in the UK.³⁴ On spectrum a continued relaxing of local access to spectrum continues to be the consensus from members.



Chapter 6 – Driving adoption in key economic sectors

6.1 Ensuring wireless connectivity delivers wider government objectives, working with the telecoms industry and other sectors to assess the role 5G and advanced wireless connectivity can play in delivering net zero to the UK.

6.1 techUK endorses recommendation 27 within the National Infrastructure Commission's Second National Infrastructure Assessment that recognised the need for government to identify the specific telecoms needs of the energy, water and transport sectors and ensure that infrastructure is delivered to meet these by 2030 and 2035.³⁵ techUK convened industry for a briefing on the role of telecoms in net zero.³⁶

Key takeaways from techUK members included the need for government analysis to look at the 'next step' of supporting advanced communication technology to do what it can for the UK's net zero ambitions. While the government has outlined plans to commission a report on this, there is little detail on the contents and timeline of delivery.



Chapter 7 – Shaping the development of 6G

7.1	Ensure the UK can shape the development of 6G by:		
7.2	Investing up to £100m in future telecoms, including through new, interconnected hubs aiming to put the UK at the forefront of the diverse 6G research agenda.	7.2	Progress has been made by the UK Government in the Future Telecoms Mission Fund programme ³⁷ , consisting of £70m funding, aims to further the goal of UK as a global leader in Future Telecoms, including 6G. This includes £39m for Future Telecoms Research Hubs and £22m for the Future Telecommunications Challenge.
7.3	Developing and promoting a UK 6G vision through international fora.	7.3	There has been little update on the 6G vision since the Wireless Infrastructure Strategy. The pillars for 6G strategy were a vital first step in looking ahead to 6G. However, techUK members continue to outline that the UK Government should prioritise the successful roll out and uptake of standalone 5G across all regions of the UK. Nonetheless the UK Government has a key role to play in the creation of common international standards to build an open, secure, resilient, flexible, and sustainable 6G.
7.4	Forging international alliances to conduct joint research and expand our influence in the development of next generation technologies.	7.4	The UK Government made progress in October 2023 when joining a global coalition to enhance communication network resilience – this includes Australia, Canada, Japan, the USA. ³⁸ The Global Coalition on Telecommunications (GCOT) will also explore opportunities for closer coordination in areas such as R&D, information sharing and international outreach.



Conclusion

In spring 2024, techUK's Communications Infrastructure and Services Programme set out to gather members' feedback on what industry would want to see actioned post the expected UK general election – helping those in government maintain a positive, ambitious, and effective policy framework for the next five years. We have touched on the role the regulator Ofcom plays, and our members are ready and willing to engage with regulatory stakeholders further – it could be that, as technological advancements continue, there will be additional feedback for techUK to gather.

We also mentioned the centrality of indoor connectivity to the success of a Telecoms Action Plan and look forward to working on this too.

But our key message remains – good progress has been made, but more can be done to ensure the UK maximises the benefits of rolling out world-class future-proof and resilient digital infrastructure. This infrastructure will underpin our economy and society as the UK seeks economic growth, prosperity, and a greener, fairer future.

References

1. Ofcom (2024) 'Connected Nations: Spring Update 2024'
<https://www.ofcom.org.uk/research-and-data/multi-sector-research/infrastructure-research/connected-nations-update-spring-2024>
2. GOV.UK (2024) 'National Statistics: Digital Sector Economic Estimates Gross Value Added 2022 (provisional)'
<https://www.gov.uk/government/statistics/dcms-and-digital-sector-gva-2022-provisional/digital-sector-economic-estimates-gross-value-added-2022-provisional>
3. Ofcom (2024) 'Connected Nations update: Spring 2024'
<https://www.ofcom.org.uk/research-and-data/multi-sector-research/infrastructure-research/connected-nations-update-spring-2024>
4. GOV.UK (2024) 'UK Wireless Infrastructure Strategy'
<https://www.gov.uk/government/publications/uk-wireless-infrastructure-strategy>
5. ISP Review (2024) 'UK Ranks 5th out of 179 Countries for Mobile Data Affordability'
<https://www.ispreview.co.uk/index.php/2024/04/uk-ranks-5th-out-of-179-countries-for-mobile-data-affordability.html>
6. UK Parliament (2023) 'Gigabit broadband in the UK: Government targets, policy, and funding'
<https://commonslibrary.parliament.uk/research-briefings/cbp-8392/>
7. techUK (2023) 'The State of the Connected Home'
<https://www.techuk.org/resource/state-of-the-connected-home-2023.html>
8. Ofcom (2024) 'Telecoms Access Review 2026'
<https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/telecoms-competition-regulation/narrowband-broadband-fixed/telecoms-access-review-2026>
9. Ofcom (2021) 'Promoting investment and competition in fibre networks – Wholesale Fixed Telecoms Market Review 2021-2026'
<https://www.ofcom.org.uk/consultations-and-statements/category-1/2021-26-wholesale-fixed-telecoms-market-review>
10. Department for Levelling Up, Housing and Communities: National Planning Policy Framework (2023)
<https://www.gov.uk/government/publications/national-planning-policy-framework--2>
11. How can we support women in the telecoms sector? techUK insight (2024)
<https://www.techuk.org/resource/how-can-we-support-women-in-the-telecoms-sector.html>
12. FarrPoint and DCF (2023) DCF and FarrPoint launch a new report: Local Authorities as Connectivity Enablers'
<https://www.farrpoint.com/news/local-authorities-connectivity-enablers-report>
13. GOV.UK (n.d) Digital Infrastructure Advisory Group
<https://www.gov.uk/government/groups/digital-infrastructure-advisory-group>
14. Openreach (n.d) 'Policy Hub: How to back better broadband'
<https://www.openreach.com/about/policy-hub#accordion-526c62c2d6-item-0b1cbe390a>
15. techUK (2023) Local Digital Index
<https://www.techuk.org/shaping-policy/nations-and-regions-hub/local-digital-capital-index-2023.html>
16. GOV.UK (2023) '5G Innovation Regions: Successful Regions'
<https://www.gov.uk/government/publications/5g-innovation-regions-successful-regions/5g-innovation-regions-successful-regions>
17. Note, the UKIB was founded in 2021, after the UK Government's Future Telecoms Infrastructure Review hence no mention in the Government's 2018 Future Telecoms Infrastructure Review.
18. UK Parliament (2024) 'Economic Growth: Regulators'
<https://hansard.parliament.uk/Commons/2024-01-25/debates/6F95D5B1-C1B0-4DBA-BB8E-8DFEDC50843F/EconomicGrowthRegulators>

19. National Infrastructure Commission (2023) 'Second National Infrastructure Commission'
<https://nic.org.uk/studies-reports/national-infrastructure-assessment/second-nia/>
20. techUK (2022) Private networks: a new user guide by techUK -
<https://www.techuk.org/resource/private-networks-a-new-user-guide-by-techuk.html>
21. Ofcom (2023) Connected Nations UK Report 2023'
<https://www.ofcom.org.uk/research-and-data/multi-sector-research/infrastructure-research/connected-nations-2023>
22. techUK (2023) 'The FTIR: Fit to deliver for 5G and full fibre four year on?'
<https://www.techuk.org/resource/the-ftir-fit-to-deliver-for-5g-and-full-fibre-four-years-on.html>
23. ThinkBroadband
<https://www.thinkbroadband.com/>
24. Ofcom Connected Nations
<https://www.ofcom.org.uk/research-and-data/multi-sector-research/infrastructure-research>
25. Ofcom: Statement: Net Neutrality Review (2023)
<https://www.ofcom.org.uk/consultations-and-statements/category-1/net-neutrality-review>
26. Ofcom (2022) Spectrum roadmap: Delivering Ofcom's Spectrum Management Strategy
<https://www.ofcom.org.uk/consultations-and-statements/category-2/delivering-ofcoms-spectrum-management-strategy>
27. DSIT: Spectrum Statement (2023)
<https://www.gov.uk/government/publications/spectrum-statement/spectrum-statement#a-spectrum-vision-for-the-coming-period>
28. Ofcom (2023) 'Spectrum management for next generation wireless broadband: a discussion paper'
<https://www.ofcom.org.uk/spectrum/spectrum-management/spectrum-management-for-next-generation-wireless-broadband>
29. Ofcom - Review of Ofcom's market-based approach to mobile spectrum management (2024)
https://www.ofcom.org.uk/_data/assets/pdf_file/0034/274876/Review-of-Ofcoms-market-based-approach-to-mobile-spectrum-management.pdf
30. DSIT: Spectrum Statement (2023)
<https://www.gov.uk/government/publications/spectrum-statement/spectrum-statement#ensuring-effective-governance-arrangements-1>
31. National Infrastructure Commission's Second National Infrastructure Assessment (2023)
<https://nic.org.uk/studies-reports/national-infrastructure-assessment/second-nia/>
32. Page 19 of techUK's Seven Tech Priorities
<https://www.techuk.org/resource/techuk-calls-on-the-uk-political-partys-to-tackle-the-barriers-to-technological-innovation.html>
33. techUK event round-up: DSIT briefing on Spectrum Sandboxes (2024)
<https://www.techuk.org/resource/event-roundup-techuk-dsit-spectrum-sandboxes-briefing.html>
34. Digital Connectivity Forum: Advanced Connectivity Take-Up and Use Cases (2024)
<https://www.connectivityuk.org/2024/03/19/dcf-report-advanced-connectivity-take-up-and-use-cases/>
35. National Infrastructure Commission: Second National Infrastructure Assessment (2023)
<https://nic.org.uk/studies-reports/national-infrastructure-assessment/second-nia/>
36. techUK Industry Briefing: techUK members feed into DSIT on the role of telecoms and net zero (2024)
<https://www.techuk.org/resource/industry-briefing-techuk-members-feed-into-dsit-on-the-role-of-telecoms-and-net-zero.html#:~:text=The%20telecoms%20sector%20has%20worked,like%20with%20the%20Paris%20Agreement.>
37. UKTIN: UK Government Launches the Future Telecoms (Technology Missions Fund) Programme - <https://uktin.net/whats-happening/news/uk-government-launches-future-telecoms-technology-missions-fund-programme#:~:text=It%20aims%20to%20further%20the,UK%20telecoms%20research%20and%20innovation.>
38. DSIT "UK joins leading nations to form new telecoms coalition and invests £70 million in new future telecoms technologies" (2023) - <https://www.gov.uk/government/news/uk-joins-leading-nations-to-form-new-telecoms-coalition-and-invests-70-million-in-new-future-telecoms-technologies>



linkedin.com/company/techuk



[@techUK](https://twitter.com/techUK)



youtube.com/user/techUKViews



info@techuk.org