# UK’s AI future hinges on urgent fibre network overhaul, warns Neos CEO



As the UK accelerates its AI and digital ambitions, the country’s ageing fibre infrastructure risks becoming a major constraint. Lee Myall, CEO of Neos Networks, has warned that the UK’s core fibre network—much of it installed in the early 2000s—must undergo radical modernisation to meet the demands of high-bandwidth, low-latency AI workloads.

Data centre development is expanding rapidly, with the sector expected to double by 2028. While London, Slough and Hemel Hempstead remain central hubs, new facilities are emerging in Northumberland, Wales and Oxford, driven by land and power constraints in the South East and the need to process data closer to users. The rise of edge computing is also dispersing demand, placing new pressure on network infrastructure. One landmark example is Blackstone’s £10 billion hyperscale data centre in Northumberland, expected to create hundreds of jobs and stimulate local economic growth. However, such projects highlight the growing strain on regional power grids and underline the need for co-located energy and digital infrastructure—especially near renewable sources to reduce environmental impact.

Despite these advances, the UK’s legacy fibre routes are struggling to support a decentralised, high-demand digital landscape. Edge data centres supporting AI inference, IoT and real-time services require more resilient, distributed connectivity than the current network was designed to provide.

Government action has begun to reflect the strategic value of digital infrastructure. Data centres are now recognised as critical national infrastructure, a designation that enables greater protections and more streamlined planning. A new critical infrastructure team within government, announced by Science and Technology Secretary Peter Kyle, will coordinate efforts to secure and support these developments. Major private investments, including Amazon Web Services’ £8 billion expansion, are reinforcing this momentum. Yet Myall argues that these efforts must be matched by a complete rethinking of the UK’s core network architecture. He calls for new long-haul routes to connect emerging regions, upgrades to existing fibre, and a shift towards a flexible, decentralised model that can serve both hyperscale and edge demands. Regulatory reform is also essential. Ofcom’s efforts to foster competition and reduce the dominance of BT’s Openreach by 2031 are seen as key to unlocking innovation and investment.

Community concerns remain a critical factor. Protests in areas such as Abbots Langley reflect fears over greenbelt encroachment, resource use and limited local benefits. These issues underscore the need for developers and policymakers to engage more transparently and ensure that digital growth aligns with community values and environmental goals.

With AI adoption accelerating, the resilience of the UK’s digital backbone will determine its ability to compete globally. Achieving this will require joined-up thinking across energy and network planning, smarter regulation, and deep public-private collaboration. If executed successfully, the UK can become a global leader in AI infrastructure—delivering not only national growth but meaningful regional empowerment.

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## Bibliography

1. <https://datacentrereview.com/2025/06/an-aging-fibre-backbone-could-put-the-uks-ai-future-at-risk/> - Please view link - unable to able to access data
2. <https://www.ft.com/content/46ad623d-1f6c-4bf3-a8ba-d4c1555413b9> - Abbots Langley, a village in Hertfordshire, is considering a proposed data centre that could significantly alter its character. The plan, reviewed by Deputy Prime Minister Angela Rayner, is part of Labour's broader push to boost economic growth through infrastructure projects. The project has ignited local opposition, particularly regarding its potential impact on the greenbelt and local resources. Labour's new planning policy encourages data centre construction, classifying them as 'nationally significant infrastructure,' which could streamline approval processes. Opponents, including local councillors and residents, argue that data centres bring minimal employment and could harm the village's environment and aesthetics. The developer, Greystoke Land, contends that such facilities are crucial for economic growth and warns that failing to build them could drive investments elsewhere in Europe. A public inquiry is set for October, with Rayner's decision expected to set a precedent for future data centre developments under Labour's administration. ([ft.com](https://www.ft.com/content/46ad623d-1f6c-4bf3-a8ba-d4c1555413b9?utm_source=openai))
3. <https://www.reuters.com/technology/amazon-invest-10-billion-uk-data-centres-2024-09-10/> - Amazon Web Services (AWS), Amazon's cloud computing division, announced plans to invest £8 billion ($10.45 billion) in data centres across the United Kingdom over the next five years. This investment is projected to contribute £14 billion to the UK's GDP by 2028 and support over 14,000 jobs. The move represents an increase in Amazon's investment rate in the UK, with £3 billion already invested in London and Manchester since 2022. AWS is responding to a surge in demand for cloud services driven by advancements in artificial intelligence. The investment announcement follows AWS's significant financial commitments in other European countries, including Spain and Germany. ([reuters.com](https://www.reuters.com/technology/amazon-invest-10-billion-uk-data-centres-2024-09-10/?utm_source=openai))
4. <https://www.ft.com/content/536965d5-d80f-417c-9ec6-b6dcac251a1b> - The UK government is set to classify data centres storing sensitive information as critical national infrastructure (CNI). This move, to be announced by Science and Technology Secretary Peter Kyle, aims to protect these centres from cyber attacks and IT disruptions by providing them with extra government support. A dedicated CNI data infrastructure team will be established to monitor threats and coordinate with security agencies like the National Cyber Security Centre. This new classification is part of a broader strategy to enhance the UK's digital infrastructure, spurring economic growth and reassuring investors. The government is also backing significant investments, such as a £3.75bn data centre in Hertfordshire and an £8bn investment by Amazon Web Services. This initiative seeks to meet industry demands by reducing planning and regulation barriers and improving electricity access, aligning with the UK's goals for digital and AI advancements. ([ft.com](https://www.ft.com/content/536965d5-d80f-417c-9ec6-b6dcac251a1b?utm_source=openai))
5. <https://www.reuters.com/technology/blackstones-plans-northern-england-hyperscale-data-centre-get-green-light-2025-03-05/> - Blackstone, a U.S. private equity firm, has received approval from Northumberland County Council to build a $13 billion 'hyperscale' data centre in North East England. The centre, which will cover 540,000 square metres and involve an investment of up to £10 billion, will provide data storage and cloud computing services. The project is expected to create hundreds of long-term jobs, 1,200 construction jobs, and potentially 2,700 indirect jobs. Additionally, Blackstone will fund a £110 million growth and job scheme in the area. The demand for data centre capacity has surged due to technological advancements and the increased use of AI, contributing to a rise in energy requirements. This development follows a previous failed project by UK startup Britishvolt. ([reuters.com](https://www.reuters.com/technology/blackstones-plans-northern-england-hyperscale-data-centre-get-green-light-2025-03-05/?utm_source=openai))
6. <https://www.ft.com/content/32907928-c58a-4519-9279-bfb53d3b7153> - The UK's telecommunications regulator, Ofcom, has indicated that the country is on track to have a truly competitive broadband market by 2031, as rival networks expand and BT's Openreach's influence diminishes. Ofcom maintains various restrictions on Openreach to promote competition, but these could be lifted in 2031 if sustainable competition exists. Ofcom's director of networks, Natalie Black, mentioned the need for decisions based on current circumstances to achieve effective deregulation. So far, full-fibre broadband access has increased significantly in the country, although it still lags behind countries like France and Spain. The sector has shown losses, but Ofcom continues to support investment and growth through regulatory proposals that will be under consultation until June, with a final document scheduled for March 2026 and implementation in April. ([ft.com](https://www.ft.com/content/32907928-c58a-4519-9279-bfb53d3b7153?utm_source=openai))