



Introduction

Harwell Campus is set to become a leader in advanced wireless technology with the launch of a private 5G network. England's Connected Heartland — a consortium of local authorities including Berkshire, Buckinghamshire, Central Bedfordshire, Cambridgeshire, and Oxfordshire — is helping accelerate advanced wireless adoption through a DSIT-funded programme. At Harwell, the managed network delivered by Vodafone will provide a secure, business-grade wireless solution with strong internal and external coverage for resident organisations.

Benefits of a private 5G network

A private 5G network offers numerous advantages over traditional public Wi-Fi, including:

Data ownership and control — Enjoy full ownership and control of your data from connected devices, ensuring privacy, security, and compliance with business requirements.

Flexible architecture — Tailor the agile architecture of private 5G networks to your business's specific needs, starting small and scaling easily across multiple locations.

Greater capacity — Benefit from up to 1,000x greater network capacity, enabling your organisation to handle much higher data volumes than 4G.

More connected devices — Connect 10–100x more devices per square kilometre, supporting dense and dynamic environments.

Faster data speeds — Achieve 10–100x faster data speeds, powering advanced applications and real-time services.

Lower latency — Experience around 5x lower latency, enabling near real-time data transfer for critical operations.

Long battery life — Extend up to 10 years of battery life for low-power, machine-type devices, supporting long-term IoT deployments.

Opportunities for businesses

Businesses at Harwell can explore a wide range of applications on the 5G network, including:

- Environmental monitoring
- Robotics
- Predictive maintenance
- Asset tracking
- AR/VR virtualisation
- Wireless machine controls
- And much more

The network will be **free for the first 12 months**, allowing businesses to trial the service before deciding on a subscription.

Get involved

To explore specific use cases, businesses are encouraged to contact the programme team. To find out more about the project and get in touch, visit our website

<https://englandsconnectedheartland.co.uk/>