

Private Networks

Delivering manufacturing transformation.

Private networks are fast becoming the foundation of today's digital and automation strategies. Targeting the exact coverage and capacity requirements of your manufacturing facility, these built-for-purpose 4G/5G networks deliver the round the clock connectivity you need to transform operations, embrace smart insights and build for the future.

Industry analyst IDC estimates enterprises will invest approx. **\$5.7 billion in private networks by 2024¹**

The role of a private network

Accelerating efficiency

Assure continuity of business critical operations with always-on connectivity.

Reducing risk

Automate hazardous operations and increase site safety.

Driving the future

Enable 'smart' transformation through automation, AI and robotics.

Enabling digitalisation with private 4G/5G network solutions

Remote-control

Control and monitoring of machinery, robots and vehicles

Mission-critical communications

Guaranteed, always-on connectivity to commercial, information and production systems

Increase safety

Remove humans from dangerous areas with Augmented Reality (AR), Virtual Reality (VR) and Digital Twin

Asset localisation

Enhanced efficiency with traceability of parts and tools

Predictive maintenance

Operational continuity through assisted and proactive maintenance

Environmental sensors

Asset and infrastructure insights to identify potential harmful emissions and monitor and reduce energy consumption

Internal logistics

Automated vehicle guidance systems throughout the facility

Robotics

Automate hazardous tasks, boost productivity, maximise efficiency

How private networks work

A dedicated, private 4G/5G wireless network with coverage and capacity tailored for location and use case.

Purpose-built, private network

High availability, resilient and secure

Low latency, high-speed connectivity

Full network control and management

Advantages over public wireless and WiFi options

Public Mobile Networks. Limited capacity and coverage can mean not-spots, dropped calls and low data throughput.

Conventional WiFi. At-scale WiFi deployments require extensive physical infrastructure, are less secure, and can be impacted by interference or contention problems.

Benefits of a dedicated private network



24x7x365 continuity of business critical operations and communications



Seamless mobility and connection of static and moving assets across the full site



OPEX savings by proactively monitoring equipment to reduce maintenance



Boosting productivity through smarter, more automated processes and operations



Enhancing safety by removing staff from hazardous environments



Data privacy by keeping data on site and restricting outside access



Assured security for private network owners and users

A fully managed service from **Cellnex**

Performance Management and Data dashboard

Optimise the network and achieve complete control and visibility through real-time intelligence and analysis.

Dashboard includes insights on:



Network utilisation



Sensor data (for asset monitoring)



Active users



360° situational awareness (to increase safety)



Network availability

Project design and engineering

Coverage and capacity planning

Deployment and Commissioning

Operational monitoring and maintenance

Analytics and ongoing performance optimisation

About Cellnex

As a Critical National Infrastructure Provider and one of Europe's leading telecommunication companies, Cellnex is trusted by enterprises, the emergency services and mobile network operators.

Cellnex also brings the expertise and experience of Edzcom, a Private Networks market leader and wholly owned subsidiary, meaning that our 4G and 5G Private Network solutions provide the most assured answer to the challenges of an Industry 4.0 world.

To find out more, visit our [Private Networks solution](#) pages.

Get in touch

Get in touch with our experts at PrivateNetworks@cellnextelecom.co.uk