

# Private Networks

Delivering transformation for ports.

Private networks are fast becoming the foundation of today's smart port strategies. Targeting the exact coverage and capacity requirements of your facilities, 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 2024<sup>1</sup>**

## 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 port transformation through automation, AI and robotics.

## Enabling digitalisation with private 4G/5G network solutions

### Mission-critical communications

Guaranteed, always-on connectivity to Terminal Operating System (TOS)

### Increase safety

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

### Robotics

Undertaking hazardous tasks, boosting productivity, maximising efficiency

### Location tracking

Efficiently and automatically manage truck queues to speed loading/unloading

### Environmental sensors

Asset and infrastructure insights to reduce emissions and improve air and water quality

### Video surveillance

Aerial and marine drones for inspections and measurements

### Remote-control

Control and monitoring of container cranes and vehicles

### Logistics control

Analyse marine cargo and dock-side freight for security and streamlined operations

## 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](mailto:PrivateNetworks@cellnextelecom.co.uk)