

Why Private Mobile Networks?

Simplify Enterprise Private Cellular with a Cloud-First Approach.
The Future of Connectivity is Private & Cloud-Native

The Rise of Enterprise Private Mobile



92% of organizations have deployed or plan to deploy private 4G/5G.



Private cellular networks are **dedicated cellular networks** designed for individual enterprises, separate from public networks.



They combine **telco-grade wireless capabilities with Wi-Fi economics** and a private network model.



The network is **more important** to business operations than ever before, according to 93% of respondents in a ZK Research study.

Why Private Mobile Matters

Private cellular fills a significant gap in enterprise connectivity by offering:

Highly secure, reliable, and customizable connectivity solutions.

Robust, reliable performance with greater enterprise control over infrastructure, security, and users.

Potential to **transform various industries** by enhancing operational efficiency, security, and innovation.

Enables advanced technologies like IoT, robotics, Augmented Reality (AR), and autonomous systems.

Ensures **low latency and high reliability** for mission-critical applications.

Heightened security by keeping sensitive data within the organization's control.

Ideal Use Cases



Large coverage areas, particularly outdoors, like smart cities, seaports, or office complexes.



Challenging indoor radio environments in manufacturing, warehouses, and power plants.



Rapidly moving client devices in IoT, IIoT, and robotics for continuous data exchange.



Filling public cellular coverage gaps like dead zones and connectivity gaps between buildings and outdoor.



Secure back-office communication at enterprises with significant public access.

Challenges with Current Deployments

Despite tremendous interest, deployments face significant hurdles:

Prohibitive Product & Deployment Costs: Telco-centric products are too expensive and complex for enterprises, often requiring millions in professional services.

Rigid Architecture: Existing enterprise-grade solutions are hardware-centric, proprietary, and lack integration with enterprise networks, limiting flexibility for on-premises or cloud deployments.

Most existing "cloud" offerings are merely "**lift and shift**" of monolithic infrastructure.

Highway 9 Mobile Cloud: The Enterprise Solution

Highway 9 is the first and only vendor to build a true cloud-based platform to support enterprise cellular.



Key Features:



Full lifecycle management of SIM, SAS, radios, and network configuration through a **"single pane of glass" interface**.



Cloud-based platform with integrated mobile services stack and virtualized 5G mobile edge.



Built-in integration with major mobile operators and enterprise IT systems/policies.



Offers ultra-reliable and high-performance connectivity for AI-driven devices and IoT endpoints



Includes **robust Artificial Intelligence for IT Operations (AIOps)** capabilities.



Significantly easier to deploy and use than carrier-centric products.



Prebuilt integration into Radio Area Network (RAN) devices and clients.

Example Use Case

Higher Education Highway 9 Mobile Cloud provides an **always-on mobile network** across vast campuses, supporting:

Carrier connectivity where macro networks are unavailable.	Essential student, faculty, and staff services (e.g., E911).	Secure back-office communications, video surveillance, and advanced research labs.
Connectivity for ticketing, priority communications, license plate scanners, EV infrastructure, and mass transit systems.		Advanced projects like asset tracking, drones, AR, and VR, which Wi-Fi cannot adequately support.

Recommendations

For companies considering enterprise cellular:

1

Think of the network as a strategic asset: Modern businesses are mobile, cloud-centric, and AI-driven, making the network critical.

2

Choose a vendor designed for enterprise environments, with simplicity at the core: Avoid expensive, complex telco systems and rigid first-generation solutions. Highway 9 offers a purpose-built, cloud-native solution.

3

Consider enterprise cellular as a complement to Wi-Fi: Private cellular is designed for mission-critical networking, while Wi-Fi serves "good enough" indoor connectivity.