

# SOLUTIONSHEET

# **Managed Private Wireless Network**

## A Business-Critical Connectivity Solution

Enterprises face increasing pressure to support mission-critical applications, vast IoT deployments, and real-time operations with unparalleled reliability, security, and performance. Traditional Wi-Fi networks, while widely adopted, often fall short in delivering the dedicated bandwidth, low latency, and robust security required for these demanding environments. Congestion, interference, and limited mobility can hinder digital transformation initiatives, forcing organizations to seek more resilient and controllable wireless solutions.

#### **The Hughes Private Wireless Solution**

Hughes Managed Private Wireless Network offers a comprehensive, end-to-end solution that leverages the power of 4G/LTE and 5G technologies to create a dedicated, secure, and high-performance wireless infrastructure for your enterprise. Unlike public cellular networks or unlicensed Wi-Fi, our private networks utilize licensed or shared spectrum (like CBRS) to deliver guaranteed quality of service (QoS), superior coverage, and true mobility within your operational footprint.

Designed as a fully managed service, Hughes takes on the complexity of planning, deploying, and operating your private network. This allows your organization to harness the full benefits of private cellular connectivity without the need for specialized in-house expertise or significant capital outlay.



### **Key Features and Benefits**

- Dedicated Performance
- Enhanced Security
- Complete Control and Data Ownership
- Flexible Deployment Options
- Seamless Mobility
- End-to-End Managed Service
- Scalable and Future-Ready

#### **Private Network Architecture**



#### **Architecture Overview**

The Hughes Managed Private Wireless Network integrates seamlessly with your existing enterprise infrastructure. Our solution typically comprises:

- Access Points (APs): Indoor and outdoor units providing robust radio coverage across
  your facility.
- **Private Cellular Core:** Deployed on-premises or in the cloud, this controls network functions, device authentication, and data routing.
- Managed Services Platform: Our Network Operations Center (NOC) provides continuous monitoring, management, and optimization of your network, ensuring peak performance and reliability.



#### Warehousing

- Real-time inventory management and tracking
- Automated material handling systems and robotics communication
- Enhanced safety for personnel with precise indoor positioning
- Video analytics and quality control



#### **Manufacturing and Logistics**

- AGVs and robotics control
- Real-time asset tracking and inventory management
- Predictive maintenance with IoT sensors
- HD video surveillance and analytics



#### Oil and Gas

- Remote monitoring with real-time data collection and control of drilling operations and pipelines
- Worker safety and critical communication
- IoT sensor deployment for predictive maintenance



#### **Security and Compliance**

Hughes prioritizes the security of your private network. Our solution incorporates:

- **3GPP Standards-based Security:** Leveraging the robust authentication and encryption protocols inherent in 4G/LTE and 5G.
- SIM-based Authentication: Strong identity management for all connected devices.
- Network Segmentation: Isolating critical applications and data traffic for enhanced protection.
- Proactive Monitoring: Our NOC provides continuous security monitoring and threat detection to safeguard your network.

#### **Getting Started**

Is a private wireless network the right fit for your enterprise? Consider these questions:

- Do you have applications requiring guaranteed low latency and high reliability that Wi-Fi struggles to support?
- Are there large indoor or outdoor areas needing seamless mobile connectivity for critical operations?
- Do you require enhanced wireless security and full control over your network data?
- Is your organization adding an increasing number of IoT devices that demand robust and scalable connectivity?

To learn more about how Hughes Managed Private Wireless Network can transform your operations and accelerate your digital initiatives, please contact your Hughes representative or <u>visit our website</u>.

