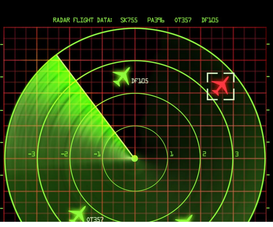
Deloitte.
Together makes progress

Delivering the 5G enabled digital transformation for the defense sector

5G PRIVATE NETWORKS FOR DEFENSE



5G is transforming the Defense domain, redefining how military forces connect, operate, and make decisions.

By unlocking **real-time communication, high-speed data, distributed intelligence, and scalable networked systems**, 5G enhances mission readiness, accelerates decision cycles, and supports the adoption of AI and autonomous capabilities for **operational superiority and enhanced coordination**, translated into new levels of mobility, performance, security, resilience, and data integration across domains.

$13 billion 5G in Defense market size projected by 2035[1]

20% CAGR
Forecast growth of the 5G in Defense market until 2035[2]

Sources: 1: RootsAnalysis; 2: Mordor Intelligence

The core capabilities of 5G establish it as the strategic backbone of modern Defense, providing unmatched connectivity, security, and scalability essential for mission-critical operations.

Resilient, High Bandwidth, Low-Latency Connectivity
Private 5G networks deliver resilient communications for mission-critical operations, ensuring uninterrupted command, control, and coordination in contested environments and enabling real-time situational awareness, high-speed data transfer, and rapid decision-making.

Dense Device Connectivity
5G supports simultaneous connection and control of thousands of assets (sensors, drones, vehicles, and soldiers), within the same secure network, leveraging critical data, real-time coordination, and interoperability between multidomain systems.

Secure-by-Design Architecture
5G features security by design and full end-to-end encryption, protecting mission-critical communications, ensuring, a resilient and trusted connectivity in any environment.

Key 5G use cases for Defense

- **Isolated Mission-Critical Communications**
- **Unmanned & Autonomous Systems** (Drones, AGVs, USVs)
- **Real-time ISR & Command & Control** (C2)
- **Integrated Systems and Collaborative Operations**
- **AI-Enhanced Situational Awareness**
- **Connected and Immersive Training Environments**

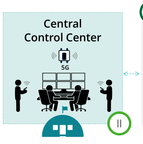


I UNIFIED CONNECTIVITY
- Seamless link between sensors, UAVs, vehicles, and soldiers
- Enables synchronized situational awareness across all assets
- High-bandwidth, low-latency private networks ensure resilient real-time comms

II DISTRIBUTED ARCHITECTURE
- Flexibly create instant mission-ready tactical networks anywhere
- Enable continuous Control Center connectivity for coordinated operations
- Deployable/ transportable Tactical 5G solutions in container, vehicle or handheld units

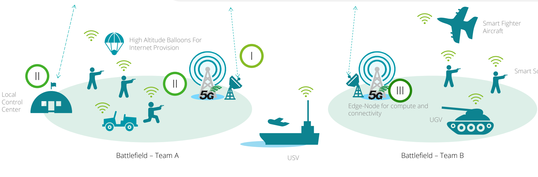
III EDGE INTELLIGENCE
- Local data processing and fusion at each node, enabling AI-driven operations and insights
- Operate autonomously in low or no-connectivity conditions
- Reduces latency and network load by keeping computation at the edge

IV CLOUD INTEGRATION
- All nodes connected to a Defense-grade combat cloud, with centralized AI and advanced analytics
- Enables distributed compute and shared resources across domains
- Ensures resilient operations with centralized oversight and control



Defense-Grade secure cloud

Security
- Mission-Critical Applications
- AI & Advanced Analytics
- Distributed Compute & Orchestration
- Secure Data Exchange Layer



How can Deloitte help?

We translate Defense operational challenges and needs into technical requirements. We integrate, test, deploy and operate end-to-end 5G solutions that enhance mission effectiveness and operational superiority, establishing **Deloitte as a key trusted partner for end-to-end solution delivery**.

UNDERSTANDING OPERATIONAL NEEDS	Identify mission challenges, operational gaps, and capability needs that guide system development
IDEATE AND PRIORITIZE	Translate and prioritize operational needs into practical, mission-driven solution concepts, and ecosystem definition
SYSTEM DESIGN & ARCHITECTURE	Transform operational concepts into detailed system designs, defining architectures, components, and integration pathways, managing the complexity of a multi-partner ecosystem
BUILD AND EVALUATE	Stage, integrate and test the solutions to validate design and the fulfillment of requirements. Tune performance before operational deployment
OPERATE AND MAINTAIN	Define operating model and procedures to ensure the sustainability in BAU. Support operation and maintenance after deployment

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