

Why 5G is indispensable for frontline agencies

The technology is revolutionizing areas as diverse as surveillance, supply chain management and battlefield surgery



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5 **G TECHNOLOGY IS** becoming vitally important to warfighters, law enforcement, border patrol and other frontline government agencies. It is recognized as so critical that Congress has mandated the deployment of 5G wireless infrastructure at all military installations.

The persistence and bandwidth of 5G connectivity are enabling a new generation of cloud-based applications that support the use of drones, sensors, artificial intelligence and large datasets. In addition, instead of labor-intensive IT upgrades and other processes, 5G allows for the automation and instantaneous delivery of software updates. All of these advances accelerate the replacement of legacy IT systems.

MODERNIZING LOGISTICS TO BOOST MILITARY READINESS

The Defense Department has spent \$600 million on multiple 5G experiments. In one instance, Federated Wireless was part of a team that implemented a 5G network at the Marine Corps Logistics Base in Albany, Ga., with dramatic results. By deploying robotics and 5G-enabled applications, the base is fulfilling requests for supplies 65% faster, and order accuracy exceeds 98%.

This is just the beginning. Bar coding capabilities on drones will enable automated inventory, which will improve overall readiness by delivering supplies and ammunition faster to warfighters. In addition, 5G-enabled cameras using AI-driven algorithms can recognize when critical supplies need to be replenished to facilitate better supply chain management.

waiting until a fighter jet returns to the hangar and plugging in an Ethernet cable to download the flight data, the process can be done wirelessly so that as soon as the wheels touch the runway, the jet starts offloading its data.

A NEW ERA OF APPLICATIONS AND INNOVATION

Private 5G networks have distinct benefits for government, which is why DOD has stated that it is a strategic direction for the department. At Federated Wireless, we custom-build networks for high performance, scale and unlimited capacity using best-of-breed technology from a large ecosystem of suppliers.

Private wireless networks provide strong security and control over where the data resides. Unlike a traditional cellular carrier that sends data through an off-site central core, private 5G networks are secure enclaves that are governed by zero trust architectures.

In addition, agencies' private networks are built on government-owned spectrum, which eliminates the cost of monthly phone subscription plans. We helped expand the 5G network at the Marine Corps Logistics Base to four buildings in a single year, all on federal spectrum using U.S.-made commercial 5G infrastructure.

“Private networks are a welcome solution for military bases located in areas where there is no cellular carrier.”

We're also seeing accelerated use of 5G smart cameras for surveillance on government campuses, at military installations and along the country's borders. Furthermore, the military has been running augmented-reality simulations with the goal of conducting surgery on wounded warfighters under the guidance of doctors who might be thousands of miles from the battlefield.

5G is also being used to modernize flight line operations. Rather than

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Finally, private networks are a welcome solution for military bases located in areas where there is no cellular carrier. On the island of Guam, Federated Wireless built an extensive environmental sensing capability network to enable the use of government spectrum and 5G.

Federated Wireless has leveraged open architectures to deploy more than 400 networks. Open radio access networks (ORANs) link a variety of mobile and enterprise devices and applications via radio waves. By facilitating interoperability, ORANs allow for competitive pricing, product diversity and innovation.

Thanks to 5G, we're entering a new era of applications and innovation that will revolutionize the way the government does business both in the civilian area and on the battlefield. ■

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Mission-critical applications demand mission-ready 5G.

Federated Wireless is accelerating adoption of private 5G with defense-grade security, delivery, and management.

Ready to modernize and transform your connectivity?

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