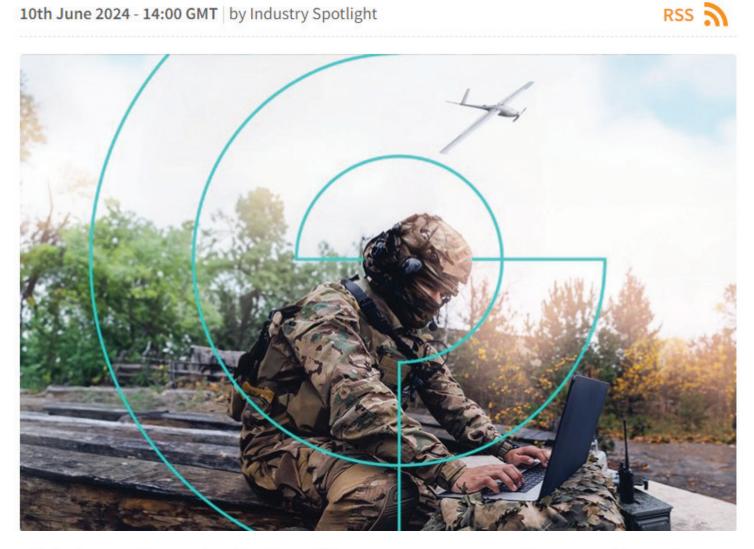
NEWS

Home > News > Land Warfare > How are SATCOM solutions changing the Net-Centric Battlefield?

# How are SATCOM solutions changing the Net-**Centric Battlefield?**

10th June 2024 - 14:00 GMT | by Industry Spotlight



Digital transformation in the military ecosystem continues to shape the future of the military communications market.

#### This article is brought to you by Gilat Satellite Networks

Seamless collaboration and connectivity are crucial for helping defense agencies realize modern and effective operating methods; sharing vast amounts of critical information (including data, video, and voice) in real-time makes military maneuvers more efficient and effective.

To achieve this new level of connectivity and operational continuity, across the battlefield and despite any enemy efforts to block communication, modern militaries are now, more than ever before, using satellite communications (SATCOM) to help ensure the successful completion of land, sea, and air missions.

This new paradigm, the net-centric battlefield, is achieved by implementing a globally interconnected, broadband communication network (including infrastructure, systems, processes, and people) that speeds up 2-way communications, allows resilient connectivity, and increases situational awareness. Terrestrial communication alone is no longer sufficient for today's ground, air, and naval forces which all depend on real-time communication. SATCOM is a key requirement to meet these growing needs. This notion has been unequivocally proven in recent operations around the world.

Furthermore, satellites are becoming smarter and the cost per megabit is decreasing quite quickly. Very High Throughput Satellites (VHTS) are unlocking opportunities for new applications and cloud technologies are maximizing operational efficiencies. In the realm of military operations, where agility, speed, and data exchange are essential, the emergence of smart Non-Geostationary Orbit (NGSO) satellites has ushered in the next generation of possibilities and capabilities for military satellite communications.

Renowned for its deployed and proven solutions, secure and resilient connectivity, and comprehensive in-house capabilities, Gilat has established itself as a trusted partner of military forces worldwide, delivering superior next-generation SATCOM technologies to support the net-centric battlefield.



including antennas, modems, transportables, portables, and SSPAs for multi-domain operations

Commanding Tomorrow's Defense Organizations with SATCOM Solutions for the Net-Centric Battlefield

## **Deployed and Proven Solutions**

Gilat's solutions are distinguished by their extensive use in demanding operational environments. The company has consistently integrated feedback from military users to refine and enhance its offerings. This continuous feedback loop has been crucial in elevating the operational value of Gilat's technologies, excelling in terms of reliability and performance and ensuring they meet and exceed the stringent requirements of modern warfare. The emphasis on user-driven development underscores Gilat's commitment to delivering battle-ready technology and its ability to adapt to the evolving needs of the military. This approach not only highlights the robustness of Gilat's solutions but also their practical efficacy in real-world scenarios.

#### Continuous, Secure, and Resilient Connectivity, Anywhere and Anytime

Gilat's approach to military technology extends beyond advanced capabilities and cutting-edge solutions; it centers on providing continuous, secure SATCOM connectivity, anywhere, anytime. In the realm of modern warfare, staying one step ahead of the adversary is not just a strategic imperative but a necessity. By remaining agile, adaptable, and forward-thinking, Gilat ensures that our solutions are equipped to meet the challenges of tomorrow. This proactive approach aligns with the fast-paced nature of the military technology domain and reinforces Gilat's commitment to providing military forces with the tools and strategies needed to maintain a competitive edge in the ever-changing landscape of national defense.

#### Comprehensive End-to-End In-House SATCOM Solutions

Gilat is renowned for its proven, end-to-end in-house SATCOM solutions, trusted by customers worldwide. These solutions ensure seamless, secure, and reliable communications across land, sea, and air, enabling military forces to maintain operational superiority in any environment. By delivering integrated systems tailored to the unique needs of defense organizations, Gilat empowers military operations with the critical connectivity required for mission success in the most challenging and dynamic scenarios.



SkyEdge IV ensures mission-critical COMMs/C5ISR operations over multi-orbit, software-defined platforms for modern military operations

Commanding Tomorrow's Defense Organizations with SATCOM Solutions for the Net-Centric Battlefield

Our comprehensive portfolio includes advanced antennas, high-performance modems, transportable and portable systems, and robust SSPAs, all designed to support multi-domain operations:

- SkyEdge IV ensures mission-critical COMMs/C5ISR operations over multi-orbit, software-defined platforms for modern military operations. With a rugged MIL-SPEC design, our field-proven system for land, sea, and air is suitable for any field condition, providing real-time feeds for any platform and compatibility with future unmanned and autonomous platforms.

 Point-to-point (SCPC/MCPC) next-generation Software-Defined Radio modem provides TRANSEC and anti-jamming capabilities for Communications-On-The-Move / Communications-On-The-Pause (COTM / COTP) applications, such as armored vehicles and manpacks.

- Proven, high-performance ESA terminal provides dual transmit and dual receive capabilities, enabling multi-orbit (GEO, MEO, LEO) operations across land, sea and air

- Solid State Power Amplifiers (SSPA) with DIFI interface support military applications for gateways and terminals to provide true 'always-on" SATCOM

 Portable and transportable solutions enable mission-critical remote communications in the most challenging environments and locations

### **Trusted Partner for Defense Agencies**

Gilat's track record, commitment to security, and continuous innovation have earned the trust of defense organizations across the globe. Our cutting-edge technology is a force multiplier in the net-centric battlefield, enabling defense agencies to fulfill their missions with confidence.

Gilat's end-to-end, in-house SATCOM capabilities are a testament to our dedication to providing the most reliable and advanced communication solutions for defense and government applications in the most challenging and dynamic operational scenarios.



AUTHOR Industry Spotlight

News and analysis content provided by the aerospace and defence industry, putting a spotlight on ...