



ISAC

Connected Sensing.
Unmatched Awareness.
Accelerated Decision-to-Action.



Send a **STRONGER SIGNAL™**

Forging the Future of 5G, 6G, and National Security

Integrated Sensing and Communication (ISAC) transforms existing 5G infrastructure into a resilient, wide-area sensing layer, empowering U.S. national security missions and force protection teams with a transformative new domain of awareness for cost-effective counter-UAS initiatives.

THE THREAT IS ALREADY HERE

Inexpensive, commercially available drones have moved from nuisance to a strategic weapon transforming modern warfare. Operation Spiderweb, where Ukraine attacked Russian strategic airfields, showed how a swarm of low-cost UAS can cripple billions of dollars in military airpower in a single strike. Along the southern border, hundreds of unauthorized drone incursions occur daily — most of them below the floor of legacy radar and outside the field of view of fixed cameras. Harnessing commercial technologies to secure networks and solve challenges will help mitigate these modern threats. Ericsson Federal is accelerating delivery of ISAC to address these national security threats.

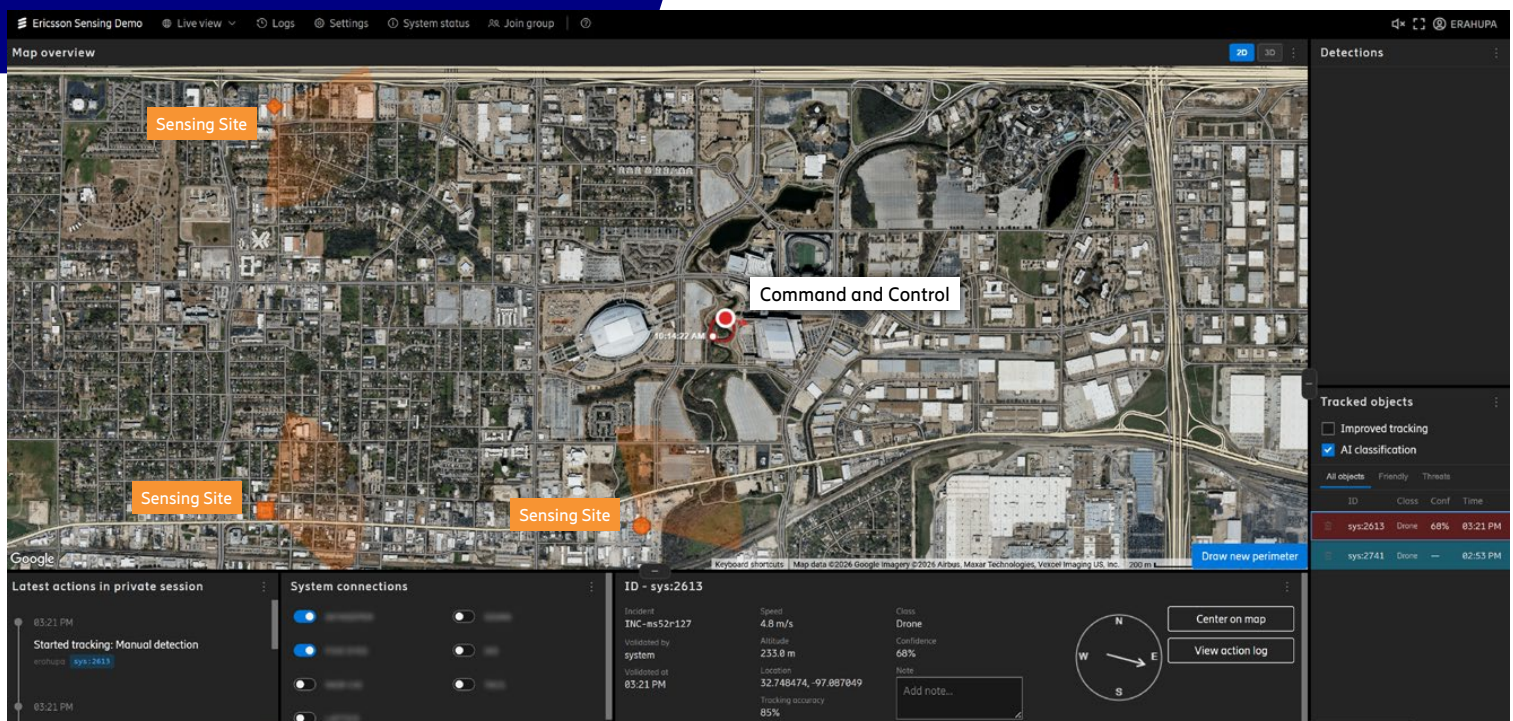
\$7B

aircraft damaged in Operation Spiderweb by 117 drones costing roughly USD 2,000 each.

328

average number drones detected within 500 yards of US southern border per day in 2025.

Dashboard from Ericsson sensing demonstration showing sensing sites and detected drones



FROM CONNECTIVITY TO PERCEPTION

ISAC is the capability that turns a mobile network from a pure data pipe into a distributed sensor grid. Using radio signal reflections, time-delay analysis, and AI-driven pattern recognition across existing 5G radios and towers, the network itself detects, tracks, and classifies unconnected objects — drones, ground vehicles, and personnel — moving through its coverage area. Because it rides on infrastructure that is already fielded, ISAC delivers wide-area situational awareness at the edge of the battlespace, the border, and the installation perimeter, preserving existing budgets and footprints while eliminating the need for a new hardware program of record.

Specifically, ISAC:

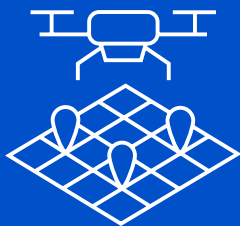
- **Closes a Situational Awareness Gap.** Detects low altitude drones that radar and fixed cameras routinely miss.
- **Leverages Existing Footprint.** Runs on modified commercial 5G radios installed on existing sites — no new towers.
- **Detects and Tracks.** Generates real-time target metrics: location, velocity, elevation, and flight path for integration with fielded C2 systems.
- **Transforms Mobile Infrastructure.** Converts every 5G site into a node in a nationwide, network-native sensor grid.

MISSION APPLICATIONS



Force Protection & Installation Defense

- Wide-area airspace monitoring around bases and critical infrastructure — with no added camera or sensor footprint
- Real-time exposure of airspace activity to sharpen tactical decision-making during pre-planned and emergent operations
- Recorded sensing data to support post-event forensics, training, and continuous improvement of joint concepts of operation



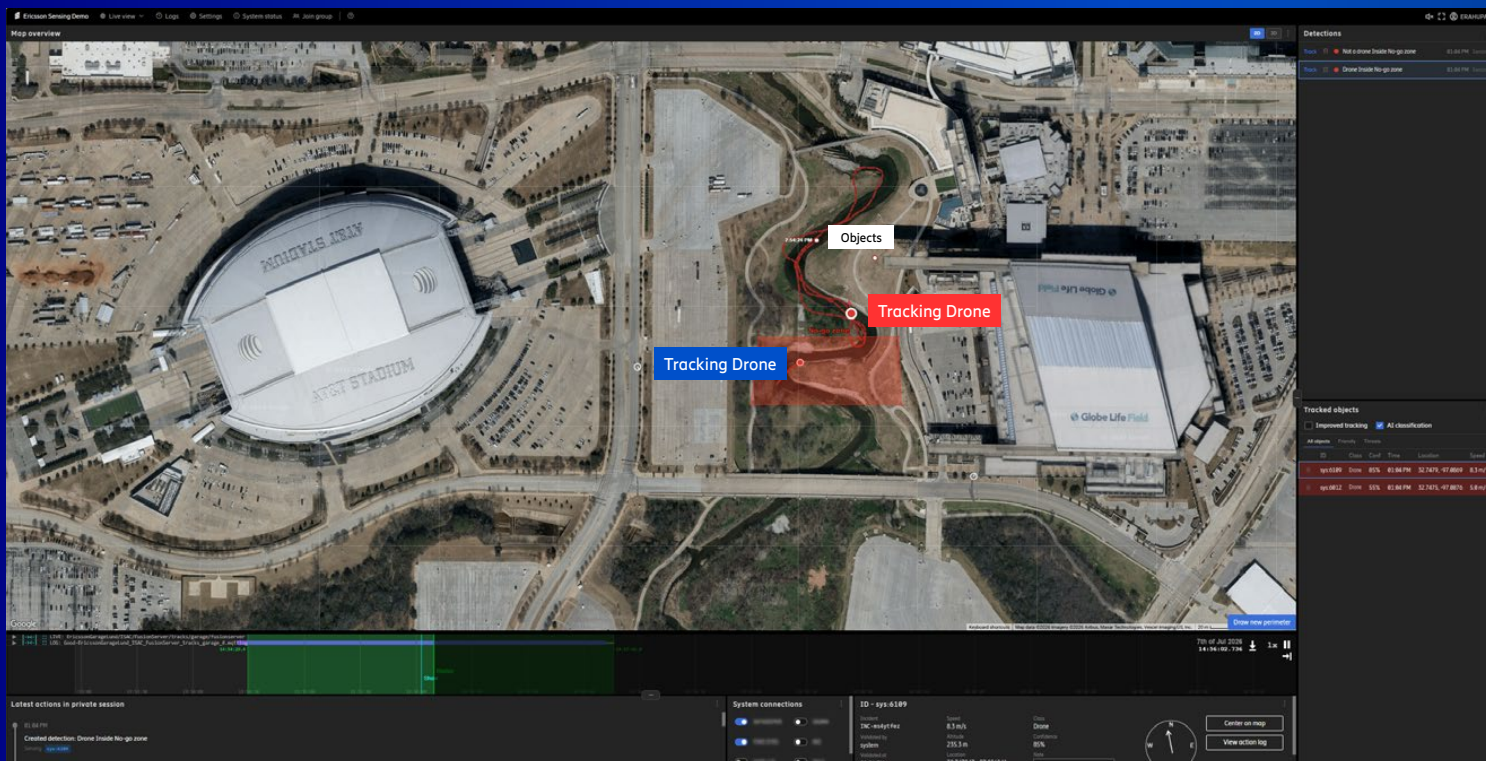
Border & Homeland Security

- Persistent, wide-area coverage for counter-UAS and border surveillance where radar and cameras struggle at low altitude
- A shared, network-based common operating picture that complements existing CCTV, radar, and ground reporting
- Coordinated response support for incursions, incidents, and cross-border activity



Contested & Emergent Operations

- Enhances the shared operational picture for large-scale events, emergency response, and critical-infrastructure protection
- Multi-target detection and tracking of vehicles, personnel, and assets across roads, rail, and installation approaches
- A foundation for future counter-swarm and low-altitude airspace management missions



KEY BENEFITS OF NETWORK SENSING

- **Hardened Network Foundation.** A scalable 5G/NextG backbone that doubles as the connective tissue for sensing, AI, and autonomy — one hardened infrastructure investment, not a stack of point solutions.
- **Non-Cooperative Target Detection.** Exploits the Doppler shift that is already present in RF communications signals to sense, track, and classify unconnected objects — drones, vehicles, personnel — at ranges up to 6km, with no dedicated sensor hardware required.
- **Stable Multi-Target Tracking.** Proven multi-target detection and tracking performance using commercial mid-band Massive MIMO radios that are already being fielded today.
- **Direct C2 Integration.** Sensing outputs integrate straight into fielded command-and-control systems — end-to-end delivery from architecture through fielding, at the pace the mission requires.

PROVEN IN THE FIELD

This is not a 6G concept slide — it is a fielded capability advancing today. Following an initial drone-detection proof of concept in February 2026, Ericsson conducted a live, multi-drone tracking demonstration around AT&T Stadium in Dallas, TX using modified commercial 5G radios on three existing 5G sites. The demonstration generated real-time location, velocity, and elevation data across the full flight path of multiple simultaneous targets — validating the signal processing, tracking, fusion, and data-exposure building blocks that will carry directly into Ericsson's native 6G ISAC architecture.

WHY ERICSSON FEDERAL

Ericsson Federal is how the United States gains network superiority over increasingly sophisticated adversaries. More than 60% of U.S. wireless traffic already runs over Ericsson networks, backed by nearly \$5B in annual R&D and 12 R&D and innovation centers on U.S. soil. Fielding ISAC on that installed base means military commands, DHS, and U.S. government agencies inherit a sensing capability at the scale, security, and speed their missions demand.