

DISTRIBUTED SPECTRUM COLLABORATION AND OPERATIONS (DiSCO™)

Spectrum dominance in high-threat environments

DiSCO technology is a resilient, future-fit electromagnetic spectrum operations (EMSO) architecture that weaponizes electronic warfare (EW) data to achieve overmatch at campaign speed. It reduces the time from unknown signal identification from months to minutes; thus enhancing survivability and ensuring freedom of maneuver in all complex environments.

DiSCO

In partnership with EverFox and leading cloud providers, L3Harris is developing an integrated, enterprise level, EMSO architecture. DiSCO provides the connective tissue needed for real-time data sharing, analysis, battle management and command and control (C2) to enable spectrum dominance and closure of long-range kill chains. Our solution is built with all domains and open standards in mind, enabling integration of third-party vendor sensors, software applications, node hardware components and user interface/visualization tools. The design of DiSCO prevents vendor lock.

SOLUTION BREAKDOWN

DiSCO consists of seven main parts: leading edge sensors, datalink communications interface hardware, tactical cross domain solutions, graphics processing unit, software algorithms (i.e. AI/ML), cloud access, graphical user interface and an application marketplace “store.”

FUTURE-FIT EMSO ARCHITECTURE

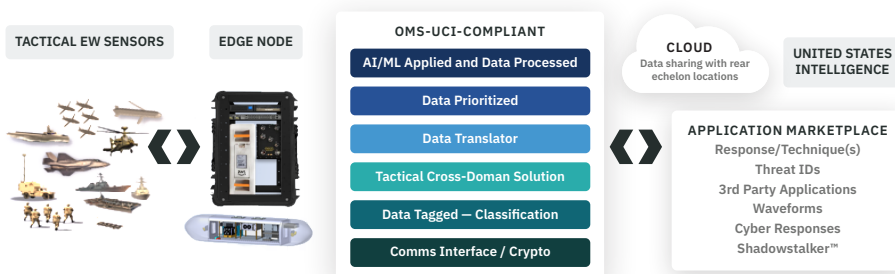
DiSCO seamlessly fuses battlefield sensors, data links and communication methods into a unified EW network.

- > Employs cloud technology and AI/ML for real-time situational awareness and swift adaptation to RF threats
- > Offers a flexible hardware/software solution with easy deployment across various platforms, preserving mission integrity
- > Ensures robust data exchange for quick updates and strategic management of EW operations
- > Enhances the survivability of existing EW/Radar systems with provisions for future advancements



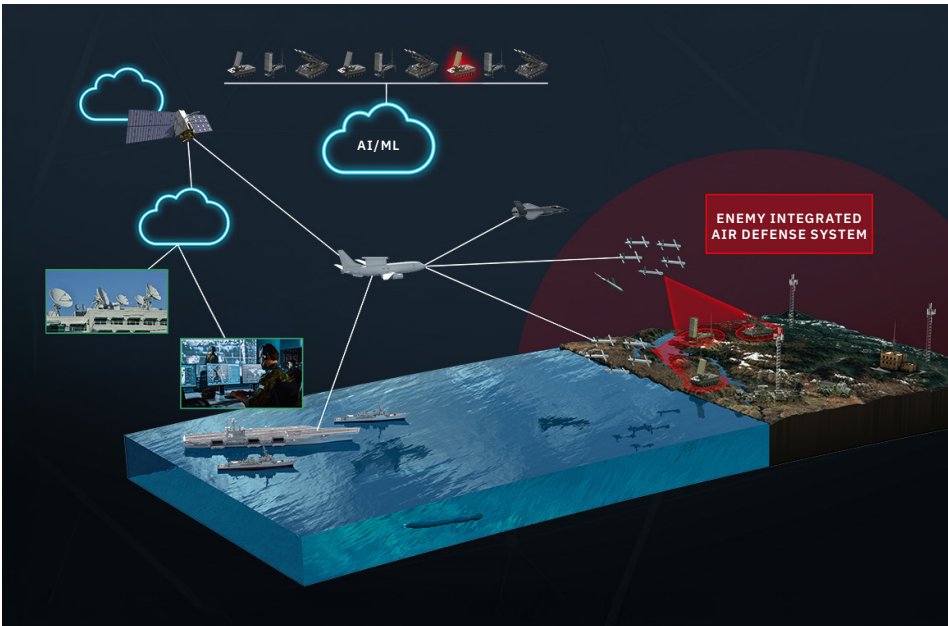
BENEFITS

- > Enhanced and shared spectrum situational awareness
- > Near real-time signal analysis capabilities
- > Improved response times to counter unknown RF threats (~720x improvement)
- > Leverages existing platforms and networks
- > Platform and domain-agnostic architecture
- > Open and scalable design
- > Ready now solution
- > Assists with data triage
- > Rapidly detects and adapts to changing threats
- > AI/ML enabled for increased sensor to shooter timelines



DISCO TECHNOLOGY STACK ENABLES A CASE-BY-CASE APPROACH

Cloud Provider	Any – demonstrated (TRL-6) on AWS and Azure
Cross-Domain Solution	Everfox High Speed Guard
Edge Node Hardware	Configurable, ranging from small SWaP (size weight and power), to ruggedized for flight, to high-performance computing (HPC) variants, up to NVIDIA DGX B200 array
Applications (Business Logic)	Configurable; Mission Data Reprogramming, Cognitive EW, Spectrum Monitoring and Electromagnetic Battle Management (EMBM)
Application Platform	Configurable; currently leveraging L3Harris IEI
Third-Party Solutions and Applications	Simple to develop and integrate third party applications, with access to DiSCO's storage, compute and communications resources



ENABLING CUSTOMER MISSIONS

- > Fires Cueing
- > Maneuver
- > C2
- > C5ISR-T
- > Force Protection
- > Offensive and Defensive Actions

KEY FEATURES

- > **Enhanced situational awareness:** Joint and coalition military forces will be able to share real-time information thanks to a cloud-based storage system, which collects data from various EMSO sensors operating in different areas and levels of security.
- > **Faster response:** Edge processing assisted by advanced AI and ML will enable systems to quickly identify threats and respond with countermeasures at the speed of relevance.
- > **Adaptability:** New capabilities added quickly and easily from an open marketplace of EMSO software applications that are designed to work on different platforms and tackle emerging threats effectively.
- > **Better communication:** Ground forces will be able to access EMSO data through cloud systems and beyond line-of-sight (BLOS) communications, enabling them to develop jamming responses against previously unknown signals that could not be resolved at the edge.
- > **Unified operations:** Data sharing and a common user interface will provide a clear, unified picture of the electromagnetic operational environment. This includes tools to support decision-making and ensure EMSO efforts are coordinated across all forces, reducing conflicts and enhancing maneuverability within the spectrum.

Distributed Spectrum Collaboration and Operations (DiSCO™)

© 2024 L3Harris Technologies, Inc. | 10/2024 | L27443

NON-EXPORT CONTROLLED: THIS DOCUMENT CONSISTS OF INFORMATION THAT IS NOT DEFINED AS CONTROLLED TECHNICAL DATA UNDER ITAR PART 120.33 OR TECHNOLOGY UNDER EAR PART 772.

L3Harris Technologies is the Trusted Disruptor in the defense industry. With customers' mission-critical needs always in mind, our employees deliver end-to-end technology solutions connecting the space, air, land, sea and cyber domains in the interest of national security. Visit [L3Harris.com](https://www.l3harris.com) for more information.



1025 W. NASA Boulevard
Melbourne, FL 32919

[L3Harris.com](https://www.l3harris.com)