



Creomagic Unveils Cognitive Communication Capabilities Countering Electronic Warfare (EW) Threats

The new era of software-defined radio (SDR) technology autonomously maintains reliable networks across EW and contested spectrum environments.

NESS ZIONA, Israel - June 6, 2024, Creomagic Ltd., a pioneering communications manufacturer, is unveiling its latest CreoNet EW capabilities. With autonomous, cognitive SDR and dual waveform capabilities, CreoNet radio communications technology provides mission-critical teams with more reliable, secure and resilient connectivity – even in the most challenging and congested of environments.

Recent global conflicts have highlighted critical challenges to tactical communication on the modern battlefield. With the increasing prevalence of autonomous units, field awareness has become more advanced than ever before, demanding large volumes of information transfer and synchronization. The ability to transfer critical data and video in the field necessitates network scaling, security and data rates – not to mention the growing need to combat EW. With units on the move, complex topological environments and contested spectrum environments, information has to flow through an optimal route by means of a dynamic network free of interference and disconnections.

CreoNet cognitive software-defined radios (CSDR) not only create fully encrypted networks, but also continuously analyze the electromagnetic spectrum and environment in real time, detecting and identifying potential threats and interference. Without any need for operator intervention, their technology automatically and autonomously chooses the best parameters to mitigate the effects of these factors on communication performance, thereby maintaining connectivity continuity and reliability across the network.

Creomagic technology employs machine learning to detect patterns in the frequency spectrum that indicate the presence of interference and other sources of noise, and then automatically adjusts their parameters by switching to alternative frequencies, modulation techniques or waveforms. Their software uses this information along with environmental data to make informed decisions, adjust parameters and choose the best frequency.

CreoNet unique EW technology operates across two waveforms simultaneously, creating two tactical bubbles: one for broadband information transmission, and another, immune and invisible, for tactical awareness. This dual-waveform approach ensures a smooth transition between the different waveforms and maximizes performance during EW blockages.

Alexander Shapochnik, Creomagic's CEO, says: *"The ability to operate across multiple simultaneous waveforms enables us to address the most critical challenges of modern tactical communication in an affordable manner, ensuring continuity as well as low probability of detection and interference. Our solutions excel in extremely demanding and*



unpredictable scenarios, such as EW and areas of congested spectrum, thereby boosting operational effectiveness and providing a tactical edge.”

Operationally proven, Creomagic’s suite of communication solutions are designed for multi-domain operations, supporting ground, airborne, maritime and personal tactical communication networks. Their versatility extends through personal tactical radios for special forces and first responders, as well as ground solutions for robotics, manned aerial networks and UAV’s. At the core of their solutions lies “CreoNet,” their plug-and-play CSDR technology for system integrators and platform manufacturers, leveraging capabilities such as advanced waveforms, machine learning and networking technologies for integration into aerial, ground station and personal radio products. The latest version of CreoNet technology includes enhanced EW features – advanced cognitive SDR and dual waveform.

About the company:

Creomagic develops and manufactures innovative communication solutions that form intelligent Mobile Ad-Hoc Networks (MANET), designed for mission-critical teams and tactical operations. Our radio technology provides users with reliable, secure, and resilient on-the-go communication networks for any mission. Operationally proven, our solutions serve key defense players worldwide, including tactical teams such as K-9 units, international UAS manufacturers, and others. Our solutions are engineered and fine-tuned by a highly experienced team, committed to the highest standards of innovation across our products and services.

Contact person

For more information on Creomagic, please contact:

Ronit Konfidan
Marketing Communications

+972 - 8 – 9317007

+972 - 52 - 3786665

ronit.konfidan@creomagic.com

www.creomagic.com