Organized by INTRACOM DEFENSE (IDE) | With the support of HETiA

Emerging Technologies & Applications in Modern Defense Programs

FRIDAY, 4 DECEMBER 2026 • 10:15–14:45 • IDE premises, Koropi, Attica

Bridging academic knowledge with real-world industry applications, INTRACOM DEFENSE (IDE), in collaboration with HETiA, invites you to an exclusive workshop on 4 December 2026, hosted at the company's premises in Koropi, Attica.

The workshop will focus on the following topics:

- **Wireless Communications for Defense Applications**
- **Hybrid Energy Systems & Utilisation in Modern Defense Programs**

Through expert-led presentations and interactive Q&A sessions, participants will gain an understanding of current engineering challenges, technological developments and their role in meeting evolving defense requirements.

Detailed Workshop Agenda

TIME	SESSION
10:15–10:30	Arrival
10:30–11:45	**Wireless Communications for Defense Applications**
11:45–12:15	Q&A Session
12:15–12:45	Coffee / Snack Break
12:45–13:45	**Hybrid Energy Systems and Their Applications in Modern Defense Programs**
13:45–14:15	Q&A Session
14:15–14:45	**Company Tour**

Session Details & Speakers

10:30–11:45 | Wireless Communications for Defense Applications

Wireless Communications for Defense Applications – Dr Dimitrios TRIANTIS, Wireless & Missile Systems Section Lead.

Title: "Model Based Systems Engineering – from Requirements to Production"

The presentation provides an overview of the systems engineering design process throughout the development of Tactical Radios and Datalinks.

George KARACHALIOS, Principal Engineer, Waveforms & Protocols Engineering Group Lead

Title: "Domains & activities of the group and selected projects"

The presentation provides an overview of the group's activities and highlights the main engineering disciplines involved in the design and development. Selected projects and outcomes will be also presented.

Dr. Athanasios LIOUMPAS, Design and Development Engineer at Intracom Defense, specializing in advanced wireless communications, tactical MANET networks, radio resource management algorithm design and implementation.

Title: "Decentralized multi-hop communications and Tactical MANETs

The presentation explores the design and development of advanced tactical wireless communication systems for defense applications, with emphasis on distributed MANET architectures. Attention is given to decentralized reliable multi-hop communications under challenging operational conditions, highlighting the transition from theoretical concepts and research to practical system design, implementation, and performance assessment.

Dr. Ioannis BARTSIOKAS, Teaching and Research Fellow at the National Technical University of Athens (NTUA), specializing in 5G/B5G wireless networks, radio resource management and machine learning for wireless systems. His work with Intracom Defense focuses on 5G/B5G and satellite physical-layer algorithm design and implementation.

Title: "5G/6G Technologies for Defense and Space: Insights from ongoing Projects" or "From 5G to 6G: Bringing Terrestrial and Satellite Networks Together"

The presentation outlines how 5G and emerging 6G technologies are being adapted for defense and space applications, with emphasis on the integration of terrestrial and non-terrestrial networks. Selected ESA/Horizon Europe project outcomes will be presented, covering new-era 6G waveform design and AI-assisted interference detection and mitigation, along with the path from research concepts to validated demonstrators.

Dr. Ioannis DAGRES, Assistant Professor at the University of West Attica, specializing in signal processing and wireless communications, with a focus on physical-layer algorithm design and implementation.

Title: Fast Prototyping of Physical-Layer Algorithms for Tactical Communications

This presentation explores how rapid prototyping of selected algorithmic modules supports the development of solutions addressing evolving requirements in tactical communications. It presents the SDR platforms, software and hardware tools, and the process followed from requirements to tested prototypes, providing early, reliable evidence to support algorithm and hardware design decisions.

11:45–12:15 | Q&A Session

12:15–12:45 | Coffee / Snack Break

12:45–13:45 | Hybrid Energy Systems and Their Applications in Modern Defense Programs

Dr. Petros ALEXAKIS, Section Manager of Hybrid Energy Systems at Intracom Defense (IDE), and Nikolaos GOUVALAS, Power Generation Group Leader of the Hybrid Energy Systems Section at IDE.

Dr. Alexakis is an Electrical Engineer with a background in high-voltage (HV) automotive engineering and extensive experience in the development of vehicles for leading manufacturers, including Mercedes-Benz, Honda, Bentley, Kawasaki, and Aston Martin.

Mr. Gouvalas has a background in hardware design and power electronics, with expertise in solid-state protection, hybrid power systems, and energy storage technologies.

The presentations will cover key technologies and components developed by IDE for hybrid energy systems, including the technical aspects of modular hybrid power systems for air-defense applications, demonstrating how their integration can contribute to more efficient, reliable, and advanced defence power solutions.

13:45–14:15 | Q&A Session

14:15–14:45 | Company Tour

Who should attend?

The workshop is intended for postgraduate and undergraduate students in their final year of studies.

Interested in joining us?

Take this opportunity to connect with industry professionals and learn more about the technologies shaping the future of defense.

Complete the **Expression of Interest Form by 30 November 2026 to secure your place!**

Register here

We look forward to welcoming you to INTRACOM DEFENSE!