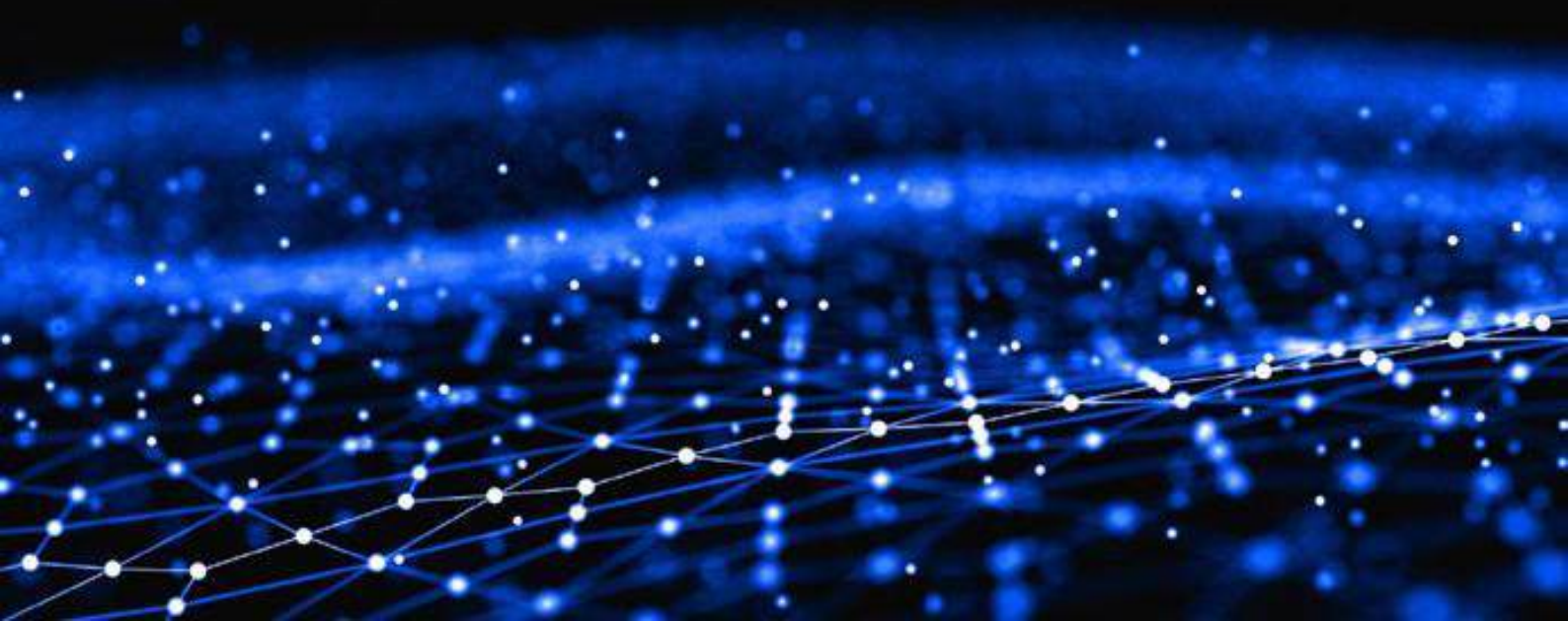
ADDITESS

Advanced Integrated Technology Solutions & Services



Contents

CEO
OWNER BIOGRAPHY

Mr. Nikolaos Koutras (MSc.) is a retired Colonel of the Hellenic Army. He graduated from the Hellenic Army Academy in 1987 as a Signal Officer of the Hellenic Army. Acting in this capacity, he successfully attended the following schools:

- Hellenic School of Signal Corps Officers, 1987-1988.
- Advanced Telecommunication and Electronic School of Signal Corps Officers 1996-98.
- NATO Land Forces Electronic Warfare Introductory Course 1993.
- NATO Land Forces Electronic Warfare Advanced Course 1997.
- NATO Joint Electronic Warfare Course 2002.

He has a Master's degree in Electrical Engineering (Telecommunications and Electronic Warfare) as he graduated from the Naval Postgraduate School (1999-2001), CA, USA and has more than 8 years of management experience in the Lifecycle support of fielded ISR Systems and particularly in Project Management, which resulted from his assignments at the Hellenic Army General Staff, Signal Directorate, Chief of ISR Department, 2001 - 2008.

He retired in 2008 and from 2009 until 2011 worked as an associate professor of electronics and military telecommunications in the Hellenic Army Military Academy. From Oct 2010 until 2012 he collaborated with the Center of Security Studies of the Hellenic Ministry of Citizen Protection as an associate researcher in various EU funded (FP7) projects.

Since 2011 he is the owner of ADDITESS and CEO of the company. Over the last fifteen years ADDITESS under his guidance, invested in establishing the role of the company through strong participation in EU R&D funded projects, FP7, Horizon 2020 and Horizon Europe frameworks, or various National R&D proposals in the fields of Security, ICT, Aeronautics (UAVs), Communications, Transportation and Environment. ADDITESS has achieved participation in twenty (23) EU-funded R&D projects, as well as three (3) R&D projects funded by the Cyprus Research & Innovation Foundation.

ADDITESS has developed four (4) major software applications for security-oriented solutions, "ADD-Task" a security incident management system, "VMCMS-GE", a content management system for the efficient storage, management archiving, processing and logging of multimedia/heterogeneous content through a modular architecture, ADD-C3 a "Command and Control – C3 system" for border surveillance operations and "CSIM" a Cybersecurity incident management application.

Moreover since 2019, ADDITESS has participated in (9) EDIDP/EDF R&D projects funded by the European Defense Organization (EDF). Under these actions & projects ADDITESS further developed its applications to meet defense standards and create new products such as ADDITESS UAV Systems and the ML/AI agent, a decision support system of complex multiple UAV operations. These advancements have added substantial value to ADDITESS portfolio, products and specialized skills.

ADDITESS Advanced Integrated Technology Solutions & Services Ltd is a Cyprus-based Small Medium Enterprise (SME) established in 2011. ADDITESS is a scientific, consulting, research and development company whose purpose is to conduct applied research and produce studies, at strategic and tactical levels, on issues related to Security Policies, Border Management, Critical Infrastructure Protection, Cybersecurity. ADDITESS also develops state of the art solutions, both hardware and software, in the above mentioned areas of expertise. ADDITESS also provides advisory, consulting services and custom solutions to various Government Organizations and to other Public and Private authorities in Cyprus, Europe and globally. The founding of ADDITESS created a new sector, by Cypriot standards, one that bridges business and research in the security domain. Over the last years ADDITESS under the guidance of its managing director and owner Mr. Nikolaos Koutras, invested in establishing the role of the company through strong participation in EU R&D funded projects, Horizon and EDIDP/EDF frameworks, and various National R&D proposals in the fields of Security, ICT, Aeronautics (UAVs), Communications, Cybersecurity, Transportation and Environment.

ADDITESS is strategically positioned between Academia, Business and Government, in Cyprus, benefiting equally from all sectors. The outcome of our positioning is research in academic fields that lacked it thus providing innovative technological solutions with high readiness in applicability. Additionally, strategic alliances allow ADDITESS to benefit from training activities, leading to sustainable collaborations within our network of contacts and the formation of partnerships with both universities and privately-owned non-profit research centers and laboratories.

ADDITESS is at the forefront of business with clients in a multitude of technological domains, such as Security, Defense, Information and Communication Technologies. Furthermore, several of our researchers have military and police backgrounds in IT Security, Electronic Warfare (EW) and Signal Intelligence (SIGINT) in large scale National and EU or NATO led operations of the last fifteen years.

Cyprus Minister of Defense Mr. Vasilis Palmas at ADDITESS Offices in Nicosia.

President of Cyprus Mr. Nikos Christodoulides at ADDITESS booth in Battlefield Redefined Expo.

President of Cyprus Mr. Nikos Christodoulides at ADDITESS booth in DEFEA Expo.

CERTIFICATIONS & AWARDS

Investing in technological solutions requires an adequate lifespan for said solutions that serves a twofold purpose. Firstly, the quality of the product is raised by allowing it to mature and continuously develop and secondly a higher revenue is achieved by reaching a wider audience. Therefore, standardization throughout the development lifecycle becomes essential and ADDITESS further builds on this by employing quality policies in other operational areas (i.e., administration, marketing).

Our company follows the guidelines of the ISO 9001:2015 standard of operations ensuring quality management regarding Consulting, Research and Development Services in Security and Information Technology Fields. ADDITESS also holds the ISO/IEC 27001:2013 Information Security Management System. Furthermore, ADDITESS has a Facility Security Clearance Certificate issued from the Cyprus MOD for the Handling EU Classified Information. Lastly members of our personnel are also authorized by the Cyprus MOD to handle EU Classified Information.

TÜV AUSTRIA HELLAS
EN ISO 9001:2015

TCert ISO/IEC 27001

The above practices have shaped ADDITESS into a reliable and trustworthy member of a widespread network of partners that belong to different sectors. This aspect is critical to our continuous development as a company, generating opportunities for further expansion and strengthening our footprint in Cyprus and abroad.

Our business philosophy is to adhere to the needs and requirements of our clients, providing high quality customer satisfaction, leading to a loyal and growing clientele. Our goal is to fully support our clients to identify their specific needs, then plan, implement and deliver our projects successfully.

During project implementation we work closely with our clients, providing a full range of project delivery services and expert advice throughout any project's life cycle.

As a result of our business philosophy ADDITESS has received the following awards:

WHO WE ARE

“The place where ideas become reality.”

APPLIED RESEARCH

ADDITESS conducts theoretical and applied research and produces studies at strategic and tactical levels. Our areas of expertise are security, safety, and protection.

EFFICIENCY & INNOVATION

ADDITESS is dedicated to delivering first rate advice, services and solutions to our clients. Our staff consists of highly qualified experts that help our clients proactively and efficiently address their key business requirements and resolve their technical issues.

END USER DRIVEN SOLUTIONS

ADDITESS creates solutions following an end user driven approach which results in highly specialized and customizable end products.

OUR MOTTO

“If we all cooperate the impossible becomes possible” Epictetus

ADDITESS SUIT OF PRODUCTS

01

ADD-Task: Incident Management System

02

ADD-C3: Command, Control and Coordination System

03

ADD-C3 Mobile: Mobile (Vehicle) Command, Control and Coordination Center

04

CSIM: Cyber - Security Incident Management System

05

VMCMS-GE: Versatile Media Content Management System - Generic Edition

06

AI/ML Support Decision system for UAV operations

07

UAVs: UAV Systems and Solutions.

08

Geospatial Products

ADD-TASK A NEXT GENERATION INTELLIGENCE REPORTING PLATFORM

Having identified the European need for customizable and intelligent incident management systems ADDITESS developed ADD-Task, an end user driven solution designed to fill this gap. Our solution combines numerous functionalities over a wide range of requirements whilst allowing full control over the data generated. ADD-Task is characterized by its modularity and our ability to create customizable solutions based on the requirements and constraints imposed. ADD-Task can be deployed either on the cloud, privately or on site at the client's premises.

ADD-Task is available in three distinct editions, Community Policing Edition, Smart Cities Edition, and Enterprise Edition, each addressing the needs of a different target audience. Additionally, the modularity and configurability of its functionalities allows for the development and deployment of custom editions that cover the specific needs of other domains of application. One such edition is ADD-Marine for Marinas and ports. Different editions come with different functionalities specially designed for the distinct needs of each domain of application.

> **Users will make better decisions if they have the relevant and accurate information in the appropriate way, and at the appropriate time.**

ADD-Task is supported by advanced technological tools to achieve secure and targeted real-time communication between involved stakeholders, and at the same time breaks down the barriers between user roles, agencies and the public, where that applies. In other words, ADD-Task promotes transparency in communication and provides traceability of communication, which in turn promote a climate of trust. ADD-Task also provides a seamless interface to legacy systems for information transmission to relevant organizations.

ADD-Task follows a loosely coupled architecture designed for modularity and flexibility. This is essential as ADD-Task adheres to the diverse governing practices of different countries by employing state of the art methods for software and also follows privacy by design principles. ADD-Task is not just a solution for incident reporting. It includes intelligent architectural components that allow for the spatiotemporal and contextual correlation of reports, the production of investigative knowledge, and report aggregation in instances where multiple reports describe the same incident. ADD-Task does not replace the operator but instead enhances their capacity by providing credible information that would otherwise cost far more logistical resources (i.e. workload determined in hours) to acquire by alternate means. Simply put ADD-Task offers resource savings by optimizing the daily workflow and streamlining it in an effective manner.

ADD-Task consists of different modules, each adding functionalities to the platform:

- A central management system with interoperability interfaces.
- A data fusion engine.
- A spatiotemporal correlation engine.
- Web based and mobile user terminals.

With the ADD-Task app, users can view nearby incidents or report their own events and receive instant status and progress updates. Agencies or organizations may then assign reported incidents to teams or members. No more delays, as all messages are responded to in real time, all from a single interface.

REPORTING

Instant reporting, prioritization and event management.

ENGAGEMENT

Chat directly with operators through text, photos, videos and audio.

TRACKING

Real-time progress tracking, task and message generation.

SUPPORT

Tactical level support and incident assignment.

GEOLOCATION

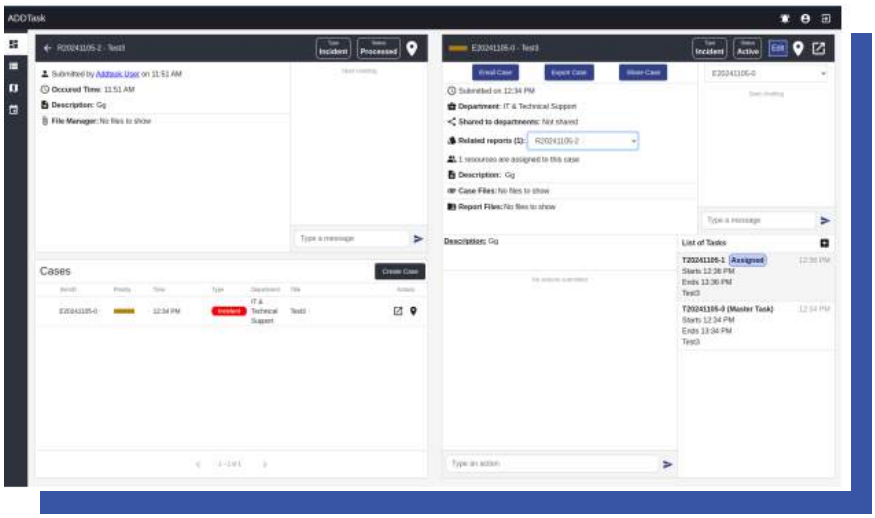
Geo mapping, live location tracking.

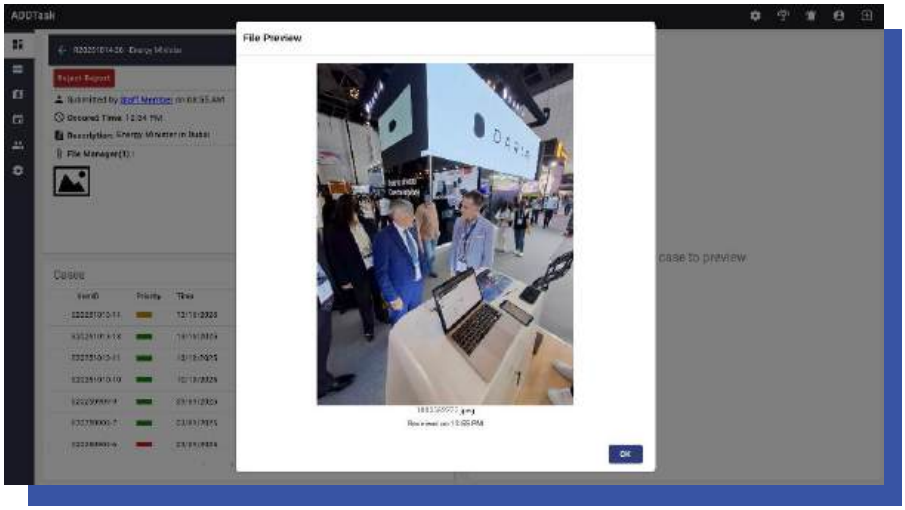
STATISTICS

Operational insights and business intelligence.

ADD-Task Functionalities:

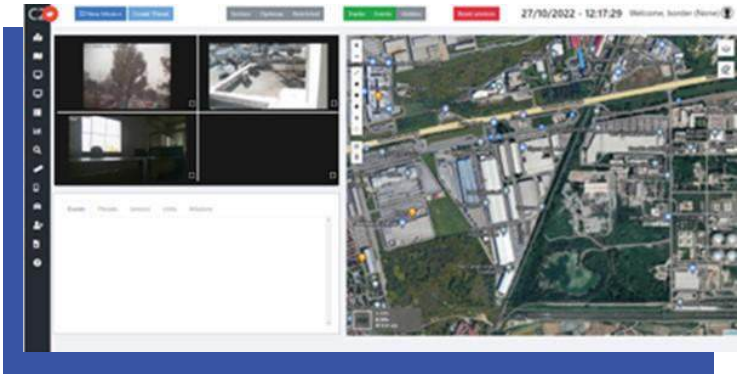
- Real time incident reporting and event management.
- Instant notification issuing of involved parties.
- Early warning and alerting mechanisms.
- Support event prioritization through a risk taxonomy.
- Automated message generation and real-time progress tracking. Resource management and task allocation.
- Dual communication with the transmission of text and multimedia messages.
- Tactical level support through real time data correlation and full duplex communication.
- Aggregated data view in 3D GIS enabled environment (2D + Time) with the ability to interface with third-party systems.
- Annotation of POIs (Points of Interest) and ROIs (Regions of Interest).
- Strategic level support through Business Intelligence analytics and data mining.
- Secure data delivery & storage.
- Integration with third-party & legacy sensors.
- User management and access rights.



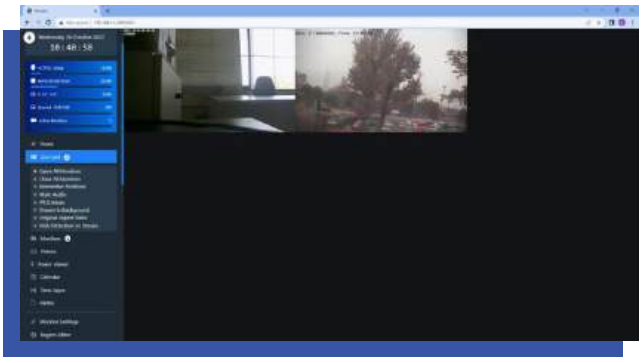


COMMAND, CONTROL AND COORDINATION SYSTEM-C3 (ADD-C3)

ADDITESS Command, Control and Coordination System is a C3 HMI system for the management of vast amounts of information for border security operations. The web-based HMI can offer enhanced situational awareness. It integrates and depicts information and data from a variety of sensors, including sensors monitoring and tracking targets in a GIS environment. Additionally, it can interface with third-party systems.



The ADD-C3 system can manage various types of sensors (e.g. E/O, Radars, acoustic, SIGINT, EW) and alarms for all designated areas and segments which are produced by an Analysis Subsystem (e.g. body, face and voice recognition, mass behavior patterns recognition). The ADD-C3 system HMI also allows for a flexible presentation (sound, light, screen message etc.) of incoming alarms. The ADD-C3 operator can decide (verify or decline) whether an alarm is a potential threat and the system will open a new event tab for completion by the operator. For each event, depending on the geographical area, a unique record is created by the ADD-C3 system.



Available features:

- Integration of heterogeneous data sources.
- GIS Visualization.
- Integration with computational intelligence components (i.e. Video analytics).
- Data fusion and data management.
- Early warning and alerting mechanisms.
- Event management.
- Resource management and task allocation.
- Business intelligence and reporting mechanisms.
- User management and access rights.

The main webpage of the ADD-C3 system is divided into four main subcomponents.

01 The GIS interface where the information is visualized on an interactive map.

02 The top bar menu where some general functionalities are available.

03 Video wall for real-time video streams and sensor control.

04 Compact event management page.

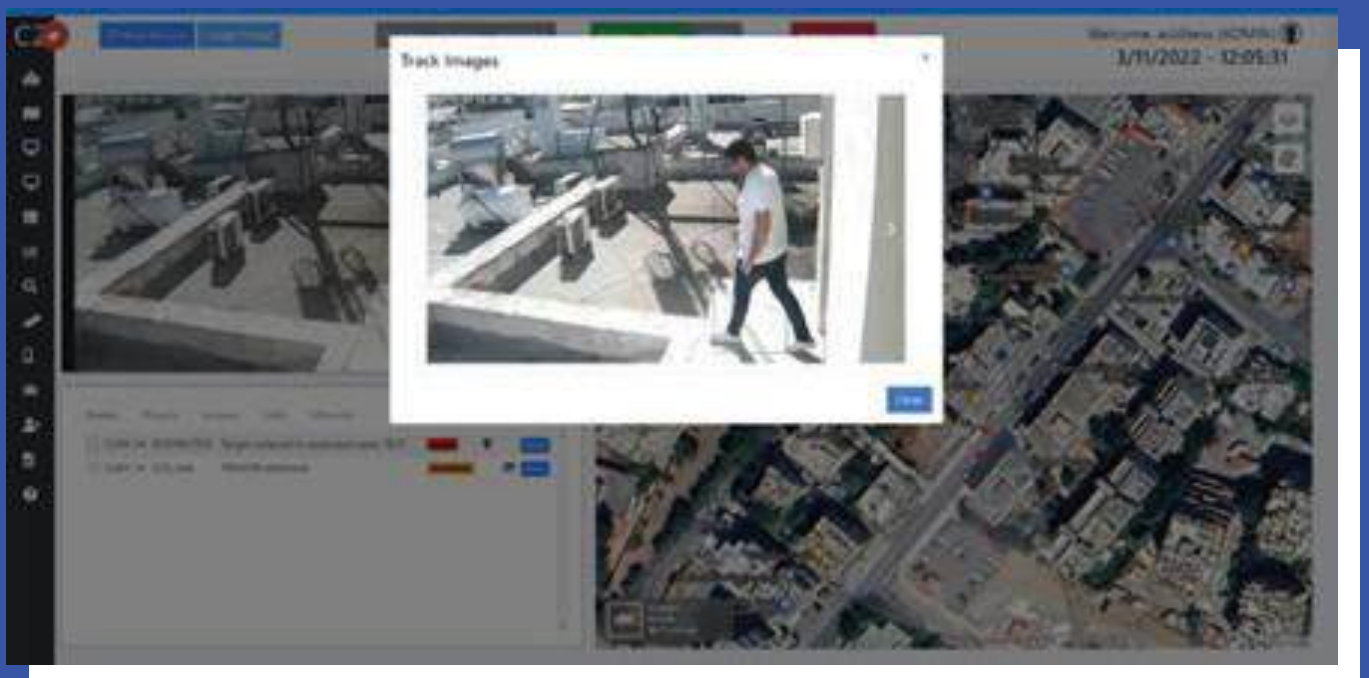
ADD-C3 THE GIS INTERFACE

In the GIS interface users are able to monitor an area of interest on a near real time basis. More specifically, real time tracks, events, threats and resources can be visualized with clickable icons. Upon clicking, details about each data type are available with action and more buttons.

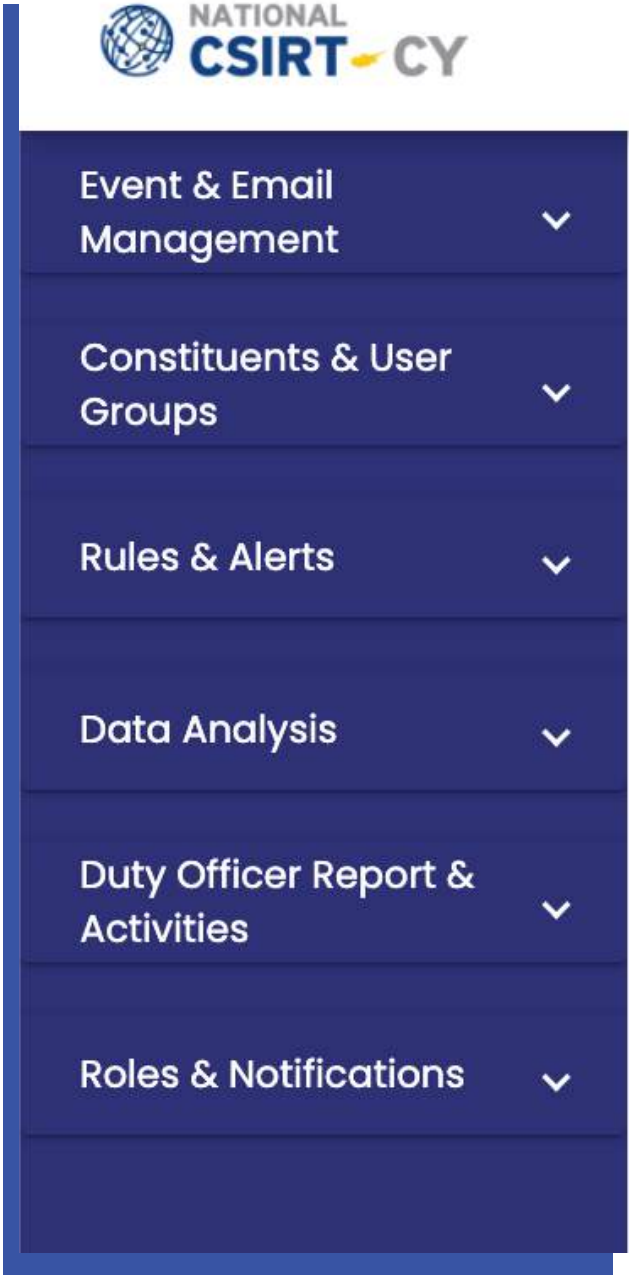
Besides the visualization of tracks, events, etc., users can use the available tools to define areas, change layouts as well as to acquire GIS-based related information (ruler, weather).

The GIS environment is available as a stand-alone page as well. This means that the HMI can be accessed through multiple screens such as the:

- Map page
- Incident management page
- BI page
- Search Engine page
- Rules page



COMMON INTERFACE FOR CYBER-SECURITY INCIDENT MANAGEMENT (CSIM)



CSIM is a Cyber-Security Incident Management framework whose purpose is to provide a set of functionalities to support the operations of a Computer Security Incident Response Team (CSIRT) or any Security Operation Center (SOC) towards investigation and reporting on cyber-related incidents.

Apart from incident management, CSIM provides a unified data repository by gathering information from multiple heterogeneous sources (i.e. Cyber Threat Intelligence (CTI), Analysis tools, etc.), real-time monitoring of incoming data, as well as filtering and pattern matching techniques through a set of rules and IP configurations.

Our platform seamlessly homogenizes vast amounts of threat intelligence from disparate sources into a single, cohesive management system while also raising the awareness of constituents by providing alerting and information sharing mechanisms.

General Characteristics:

CSIM Platform

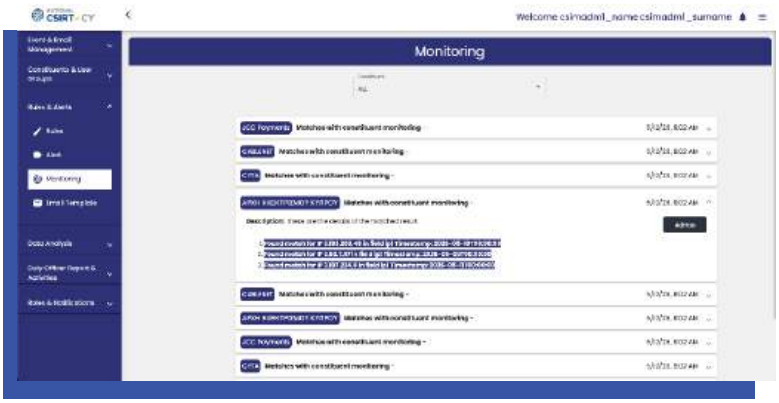
- Event (Incident) Management.
- Constituents monitoring.
- Alerting.

External Sources Integration Flexibility

- Configuration files for new data sources.
- FTP Server for file-based integration.
- Direct REST API integration.
- Fit-for-purpose integration with cybersecurity tools interfaces.

Authentication and Authorization Components

- Leveraging Keycloak to support multiple authentication and authorization protocols (OAuth, LDAP etc.) as well as user and role management.



CSIM Functionalities:

- Alerting Mechanism
- Email notifications are sent depending on triggering rules. These emails are sent on data import.
- Retrospective (complete list of relevant old and new data).
- On data import (only showing new, relevant data).
- Ad-hoc (relevant data depending on the Constituents' monitoring settings).

Triggering Rules:

- Monitoring Organization.
- User-defined Rules.
- Type – External sources and tools.
- Key - Value – The attribute of the data whose value is compared to the key using the compare operator (>, <, =, include). Regular expressions are supported.
- Clause Condition – Logical operators (AND, OR) are used to combine multiple conditions for one rule.

Event Management:

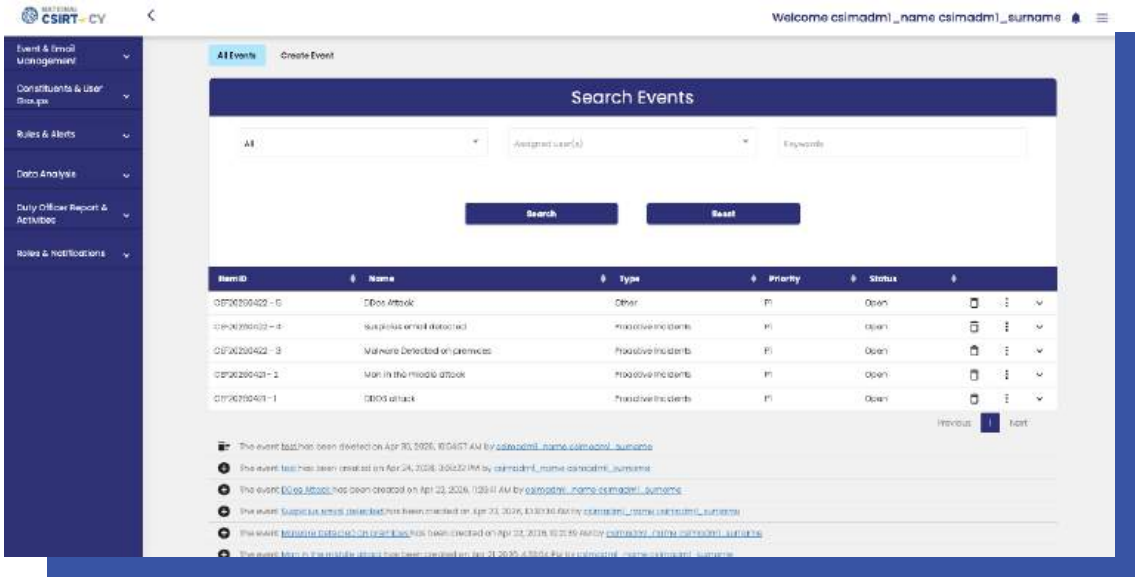
- RTIR Based event management functionalities.
- Event tracking & BI (Business Analytics).
- Resource assignments (add, remove, edit).
- Criticality/Priority levels.
- Attachments and Action logging.

Constituent Management:

- Register new constituencies.
- Associate contact points.
- Configuration of IP ranges.
- Enable the alerting mechanism on CTI gathering.

Communication groups:

- Required for email/alerting configurations.
- Add/Remove members functionalities.



VMCMS-GE 2.0 THE VERSATILE MEDIA CONTENT MANAGEMENT SYSTEM

Transform your organization's content operations with VMCMS-GE 2.0, ADDITESS's next generation SaaS content management solution. This cloud powered platform delivers enterprise grade security, exceptional performance, and unmatched flexibility for organizations across industries.

Why Choose VMCMS-GE 2.0:

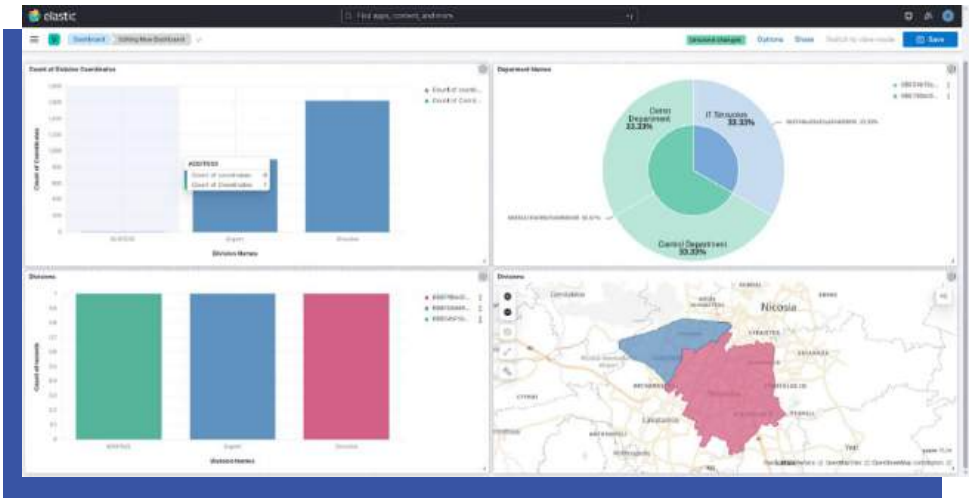
- **Enterprise Grade Security**: Protect your valuable data with advanced encryption, secure access controls, and comprehensive compliance support for industry standards.
- **High Performance Architecture**: Handle large files, complex searches, and high traffic demands with a platform engineered for speed and scalability.
- **Adaptive Flexibility**: Easily customizable for any use case, from secure incident management and training portals to real-time data intelligence.
- **Intelligent Search**: Find exactly what you need with advanced search capabilities including location-based tracking, attribute filtering, and semantic search.
- **Streamlined File Operations**: Upload and manage large files efficiently, ensuring smooth operations even during peak demand.
- **Future Ready Design**: Stay ahead with a modular, easily updatable platform that integrates seamlessly with your existing enterprise systems.

Trusted Across Industries

VMCMS-GE 2.0 serves organizations in defense, cybersecurity, healthcare, finance, manufacturing, and government sectors. Wherever secure, scalable content management is mission critical.

Experience the Difference

Ready to modernize your content management? Discover how VMCMS-GE 2.0 can accelerate your operations with enhanced security, reliability, and an intuitive user experience designed for enterprise excellence.



MOBILE COMMAND AND CONTROL CENTRE & UAS REMOTE PILOT STATION

ADDITESS Mobile Command and Control Centre & Remote Pilot Station for UAS (Unmanned Aerial Systems) consists of three workstations equipped with dual 24-inch displays, an integrated air conditioning unit and an electrical power system comprising of a generator, an inverter [Victron 3 KVA MULTI PLUS] and four 12V 100Ah (4.8 KW C20) batteries. The Command and Control Centre was developed on a Nissan NV400 L3H3 high roof van and was designed by a specialized Automotive Design Studio with an optimized interior layout that provides additional storage space.

System Layout:

This system has a wide range of capabilities and the flexibility to make changes or additions to accommodate even more.

System Capabilities:

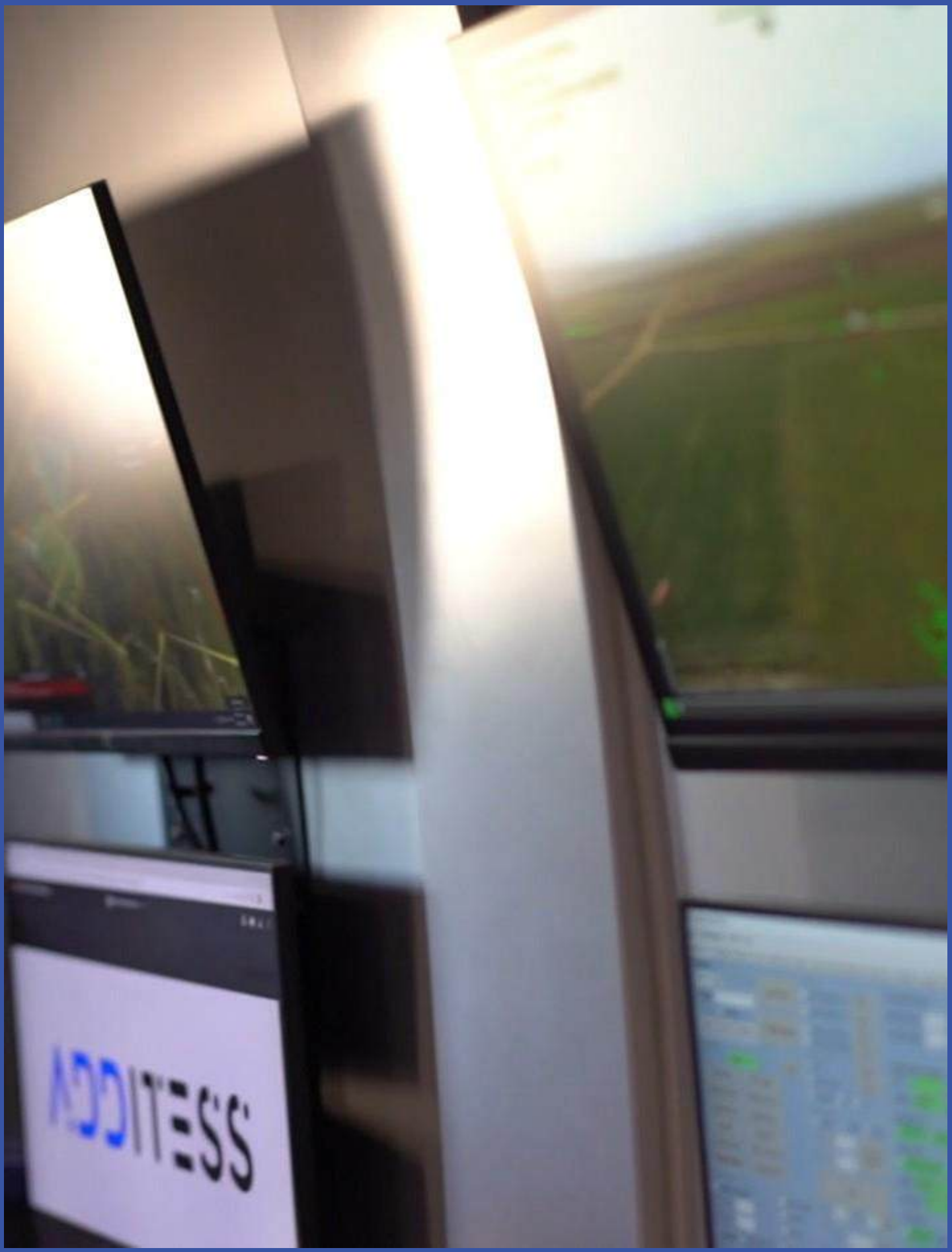
- Mobile Command Centre for UAS operations and supporting various applications.
- Remote Pilot Station for UAS applications.
- Mobile Command and Control Centre for monitoring and decision making. Mobile Secure Communications.

Additional Capabilities:

ADDITESS has chosen to incorporate its own in-house developed technologiessoftware applications to further enhance the capabilities of the overall system by running the following:

- VMCMS-GE, The versatile Media Content Management System.
- ADD-TASK
- ADD-C3, Command, Control, Coordination System.
- CSIM, The Common Interface for Cybersecurity Incident Management.

MOBILE C3 SYSTEM



MOBILE C3 SYSTEM

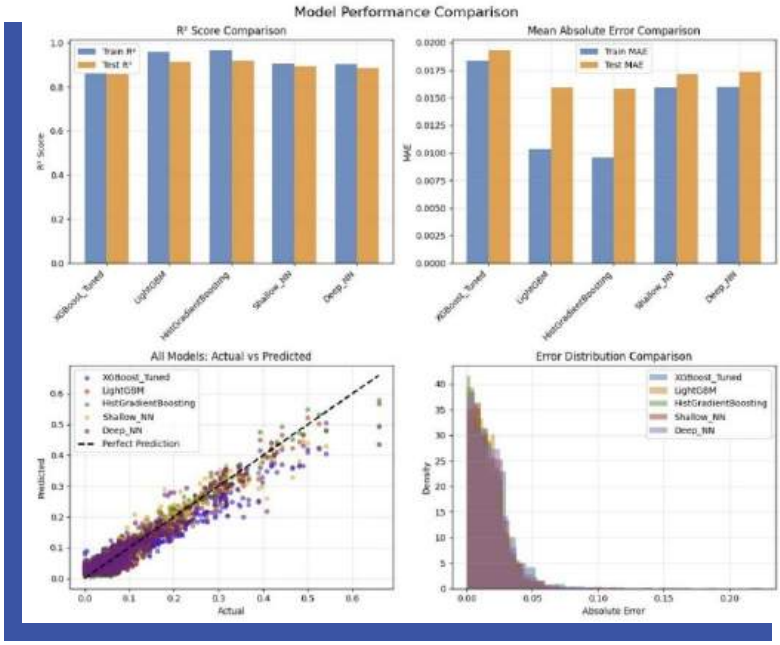
IMMEDIATE MISSION PLANNING (IMPA) AI/ML DECISION SUPPORT SYSTEM

The **Immediate Mission Planning (IMPA) AI/ML agent** acts as an autonomous system or as a Decision Support System (DSS) based on the preparation, execution, and post-analysis of multiple UAV missions according to the land combat Beyond Line of Sight (BLOS) operational requirements, mission criticality and environmental constraints.
The IMPA dynamically assigns available Unmanned Aerial Vehicles (UAVs) to incoming missions in real-time. This system is optimized for reliability and efficiency, considering various UAV characteristics and mission requirements.

The IMPA DSS integrates multiple data sources:

- **UAV Data:** Real-time status (availability, battery, sensors, etc.) via UAV system APIs.
- **Mission Data:** Incoming tasks (time, sensor, flight, constraints) via BMS APIs.
- **Crew Data:** Experience hours and duty status from personnel management.
- **Weather Data:** Conditions and time of day.
- **Regional Operations Data:** Infrastructure, alerts, and threat levels.
- **Environmental Data:** Altitude, range, and jamming levels.

Unlike generic AI, IMPA uses a physics grounded causal model (MTBF decay, Pk matrices, fatigue curves, sensor × weather interactions), whose predictions operators can audit, challenge, and trust under pressure.



Capability	Manual Planning	Generic AI	IMPA — ADCITESS
Predictive Accuracy	45 – 55%	60 – 65%	91.6% (R^2=0.916)
Variables Considered	5 – 10	10 – 20	58 features / 5 domains
Decision Latency	2.5 hours	30 minutes	< 1 minute (real-time)
Edge Case Handling	Poor	Limited	Excellent (10% edge cases in training)
Model Interpretability	N/A	Black box	4-Pillar causal audit trail
Physics-Based Modelling	No	Partial/generic	Full: MTBF, Pk matrix, fatigue curves
Theater Calibration	None	Generic config	European-specific JSON configs

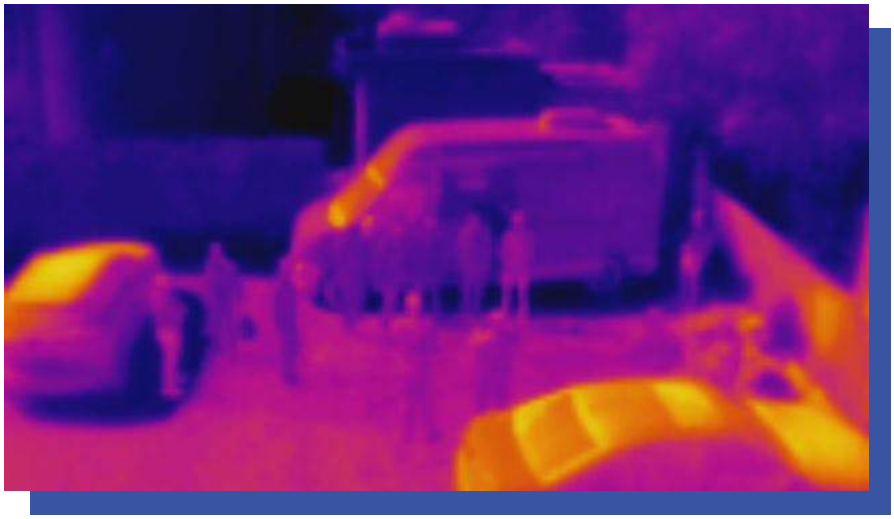
UNMANNED AERIAL SYSTEMS (UAS)

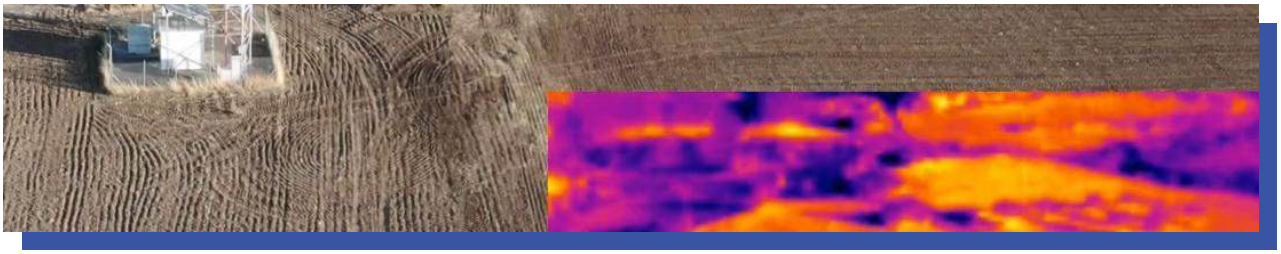
ADDITESS has developed through research and design phases a variety of UAV systems. These were derived based on general aviation standards and are optimized for reduced cost of operations. The Mini-UAV systems can navigate in controlled civilian airspace and are compliant with Homeland Security related certification requirements that apply to all relevant UAS applications and flight operations in the European sky. These are all in compliance with LUC/EASA regulations.

The UAV Platforms that are used by ADDITESS are integrated through our in-house Robotics UAV laboratory. The Platforms are designed and manufactured internally and are enhanced with various payloads such as cameras (i.e., Daylight, IR), GPS modules, CBRN sensors, GPR, and munitions. As well as software modules to fulfill each client's individual requirements.

Currently we are using and developing five types of UAV platforms:

- **Multirotor type / AP-M-2**
- **Multirotor type / AP-M-3**
- **Fixed-Wing type / AP-F-1M "TILEMACHOS"**
- **Fixed-Wing type / AP-LM-1**
- **Multirotor type / AP-LM-2 FPV 10**





More information at http://www.additess.com/main/products/

ADDITESS AP-M-2

Technical Specifications

- Diameter of 990 mm.
- Powered by six brushless motors equipped with 17-inch propellers.
- 80 to 100 Km/h speed range.
- MIL-STD Avionics, Vector 600 from UAV Navigation.
- Fully carbon fiber arms supported by billet inserts, bonded together as a mono-piece structure to increase torsional stability and stiffness.

Advantages

- Up to 45 minutes of flight time.
- 5 KG payload lifting capability.
- Easily customizable frame according to the needs.
- Multiple sensors mounting capabilities like E/O, IR, laser rangefinder
- Operational in up to 20 knots of wind speed.
- Massive power-to-weight ratio of up to 6:1.

Supported Use Cases

- Surveillance Operations
- Search and Rescue Operations
- Critical Infrastructure Protection

ADDITESS AP-M-3

Technical Specifications

- Diameter of 1100 mm
- Powered by eight brushless motors equipped with 17-inch propellers.
- 80 to 100 Km/h speed range.
- MIL-STD Avionics, Vector 600 from UAV Navigation.
- Fully carbon fiber arms, bonded together as a mono-piece structure to increase torsional stability and stiffness.

Advantages

- Up to 45 minutes of flight time.
- 9-10 KG payload lifting capability.
- Easily customizable frame according to the needs.
- Multiple sensors mounting capabilities like E/O, IR, laser rangefinder, GPR, CBRN Sensors
- Ammunition lifting capacity.
- Operational in up to 20 knots of wind speed.
- Massive power-to-weight ratio of up to 6:1.

Supported Use Cases

- Surveillance Operations
- Critical Infrastructure Protection
- Munition Dropping
- CBRN Detection

ADDITESS AP-LM2 FPV 10

Technical Specifications

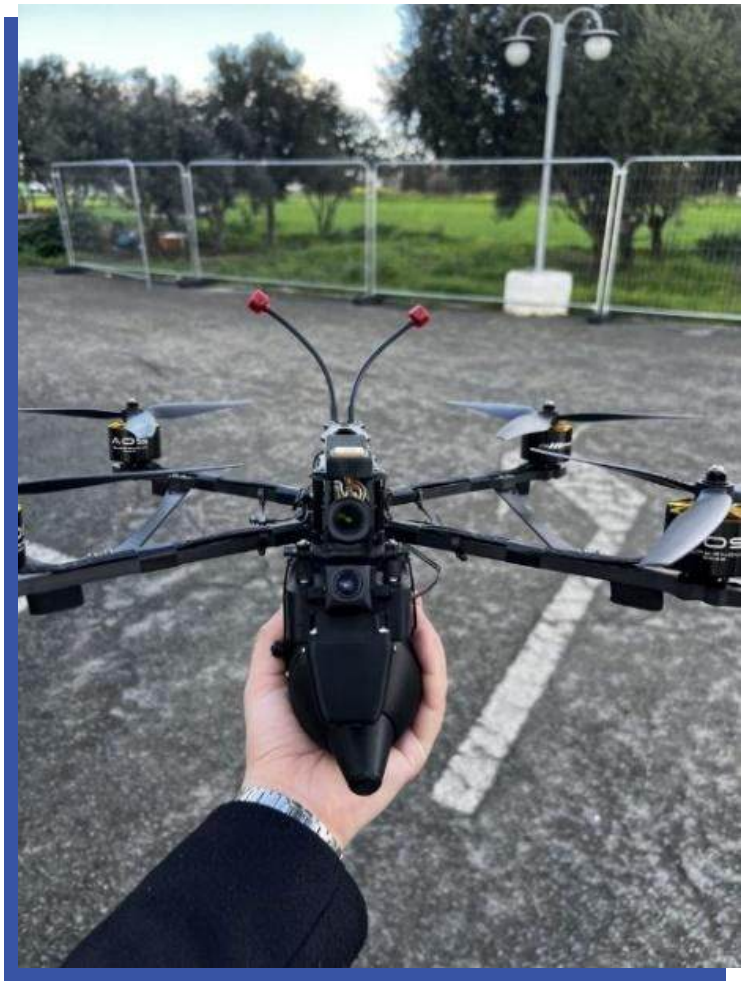
- Diameter of 480 mm
- Powered by four brushless motors equipped with 10-inch propellers.
- 190–200 km/h maximum speed range.
- Dual IMU Flight Controller.
- Supports manual radio control over MaVLink.
- GPS-based navigation, AI assisted visual guidance and terminal navigation.
- Flexible system interfaces for peripherals.
- Operates on a 6S-8S LiPo or Li-ion battery.

Advantages

- Up to 20 minutes of flight endurance with a payload.
- 1.7 kg payload lifting capability.
- Maximum takeoff weight does not exceed 8 kg.
- Operational in wind conditions up to 20 m/s.
- Supports autonomous flight modes including Stabilize, AltHold, Loiter, RTL, Guided (Ai assisted).
- Supports dual channel encrypted telemetry communication.
- Flight controller supports CAN-BUS peripheral connections for expandability.

Supported Use Cases

- Loiter Munition



ADDITESS AP LM 1

Technical Specifications

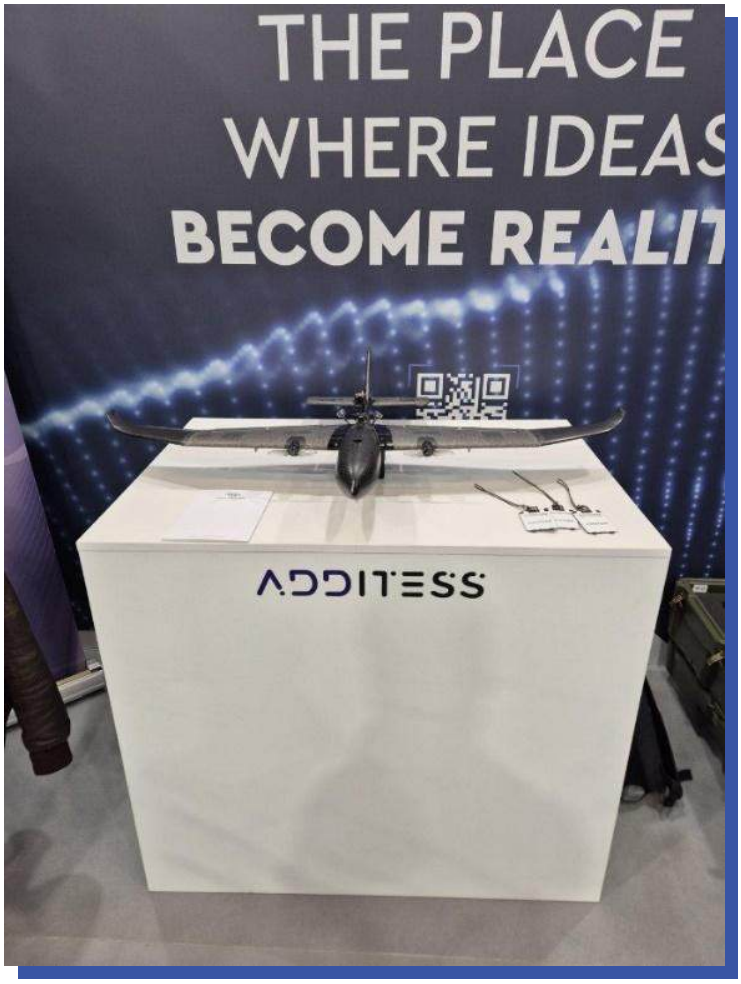
- Wingspan of 1000 mm.
- Powered by two brushless motors equipped with 4-inch propellers.
- Top speed 180 Km/h.
- Cruise speed 40-80 km/h.
- MIL-STD Avionics from UAV Navigation.
- Next version with fully carbon fiber body, bonded together as a mono-piece structure to increase torsional stability and stiffness.

Advantages

- Up to 2 h of flight time.
- 600 gr - 1 KG payload lifting capability.
- Hand Launched or drop launched.
- Max alt 15.000 ft climb, 20.000 ft drop.
- Easily customizable frame according to the needs.
- Sensors mounting capabilities like E/O, IR.
- Ammunition lifting capacity.
- Waterproof.
- Operational in up to 35 knots of wind speed.
- GNSS denial guidance (In Progress).

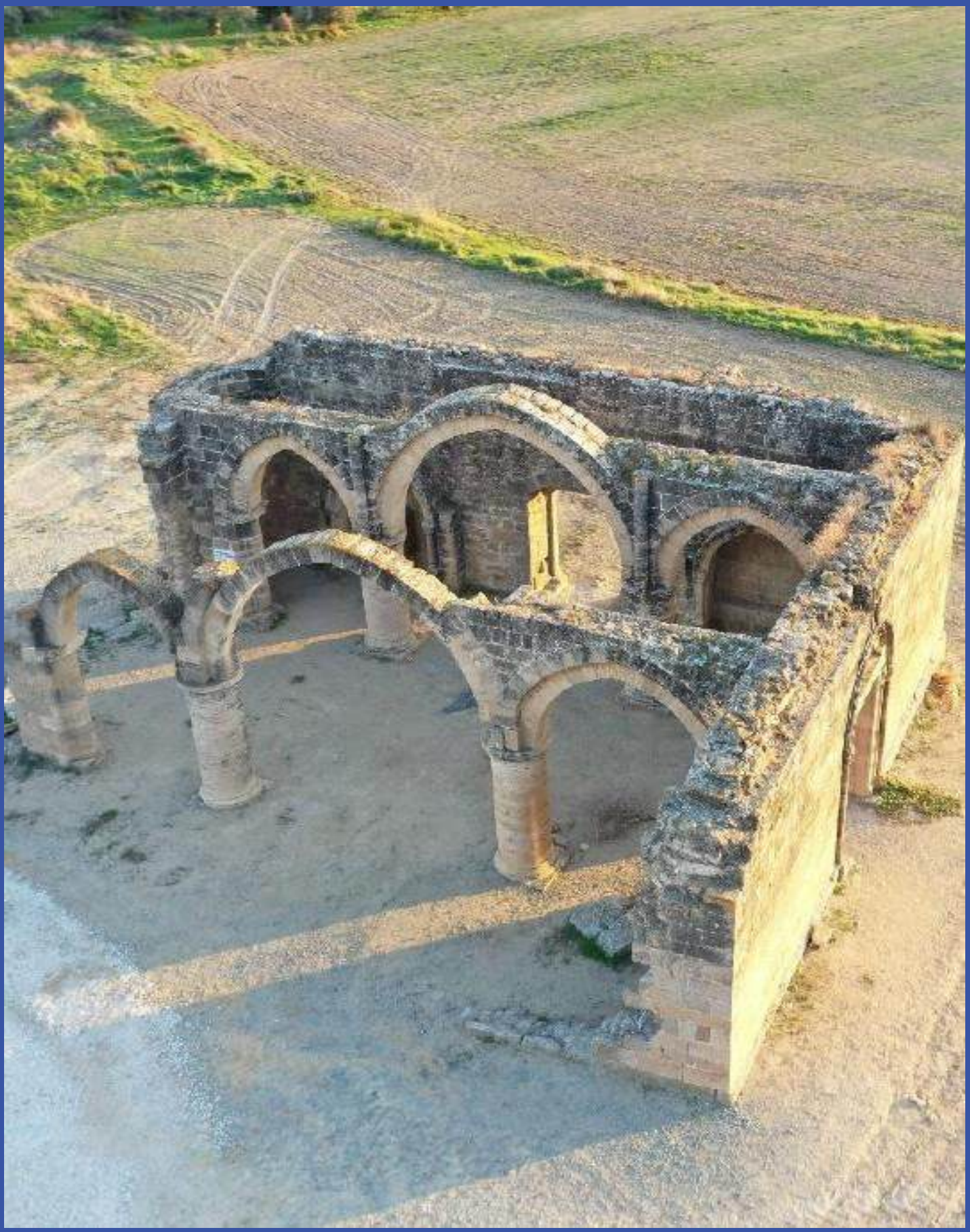
Supported Use Cases

- Surveillance Operations
- Loiter Munition



PHOTOGRAMMETRY & 3D MAPPING SERVICES

Over 160 complex structures successfully scanned down to cm scale accuracy.



ADDITESS

For Interested parties please contact:

CEO-Managing Director Mr. Nikolaos Koutras

+357 22285102

management@additess.com

www.additess.com

contact@additess.com

+357 22250959

+357 22250957