

# CYPRUS DEFENCE INDUSTRY

THE CYPRUS ASSOCIATION OF RESEARCH AND INNOVATION ENTERPRISES (CARIE)



DR. HARRIS ZACHARATOS, MEMBER OF  
THE BoD CARIE



# About CARIE

CYPRUS ASSOCIATION OF RESEARCH AND INNOVATION ENTERPRISES



**Established in 2010 to promote the interests of Cypriot R&D technology companies (SMEs)**



**Forty five innovative technology companies**



**>50M€ wide range of technology infrastructures  
>1000 highly-skilled researchers and engineers**



**>1.5Billion€ for Cyprus Economy**



# About Defence Industry Cluster

OPERATING WITHIN CARIE AS A FOCUSED-INTEREST GROUP



**Established in 2019 to promote Dual-Use/Defence capabilities within CARIE Members**



**Thirty innovative technology companies**



**R&D And Military Standard Production Infrastructure**



**25 Defence R&D contracts with a total budget of 312M€**



**National Defence Industry Association (NDIA) to EDA**



# Our Members

CYPRIOI SMES WITH R&D CAPABILITIES



CYRIC

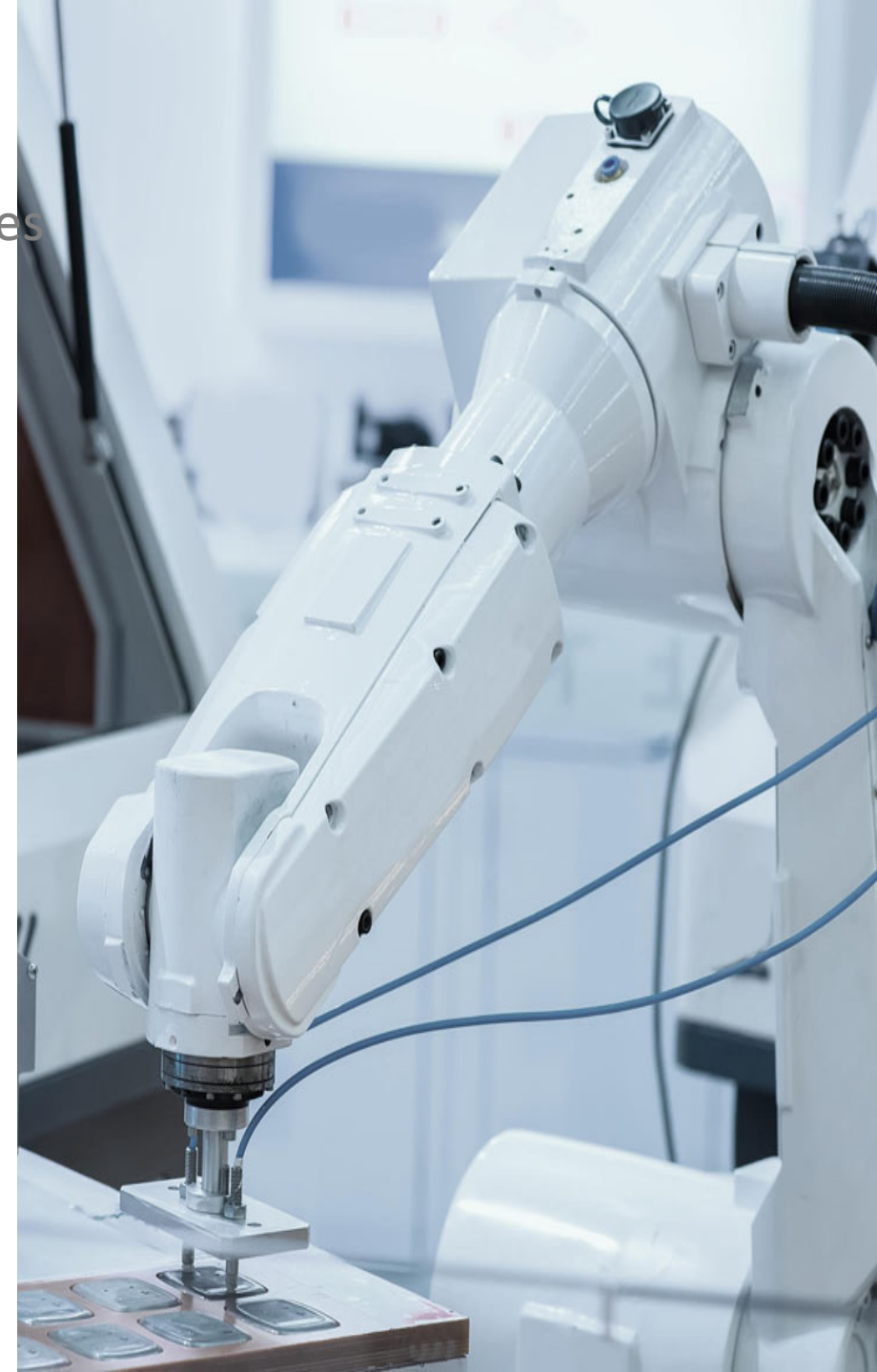
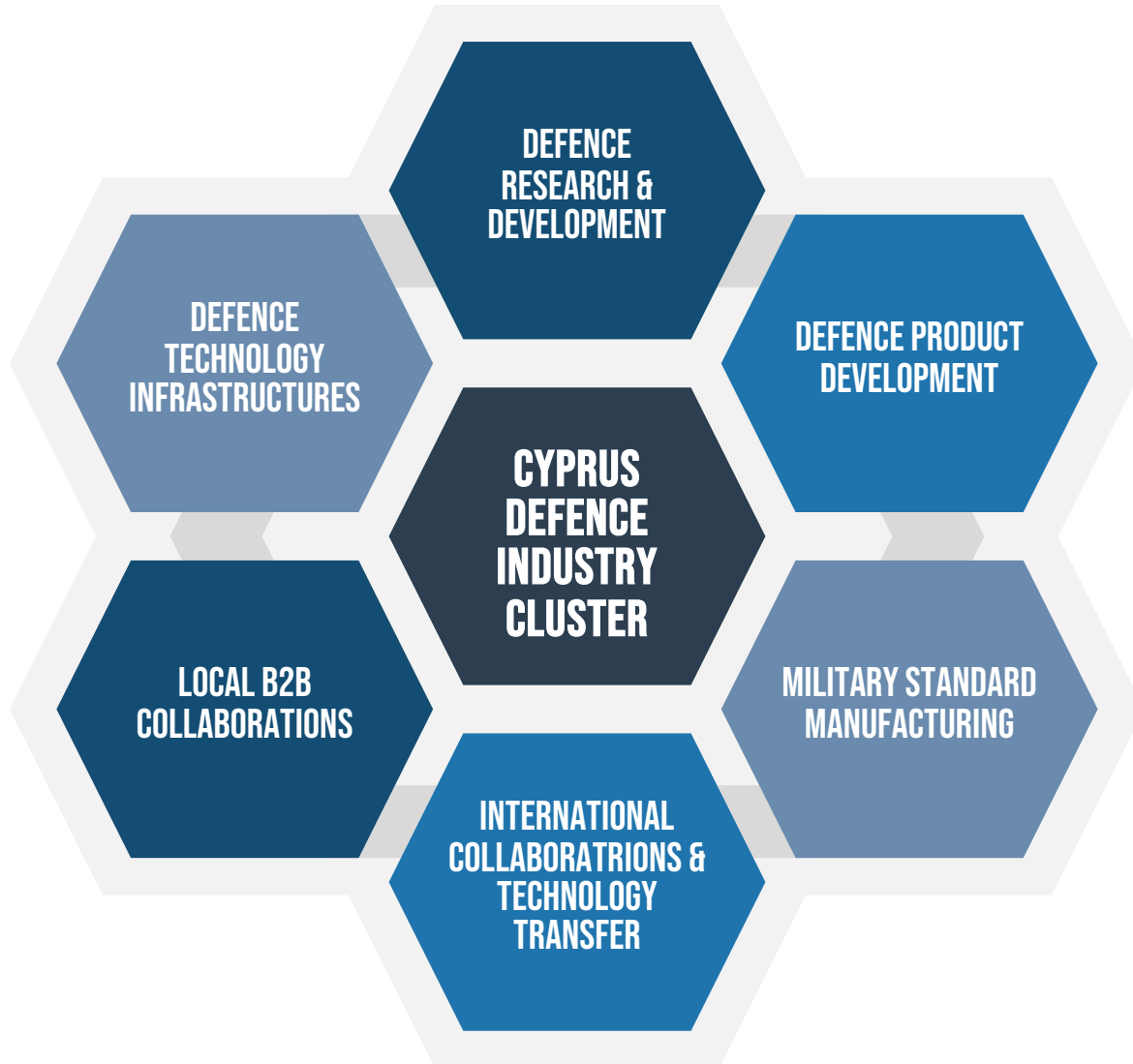


MULTIMARINE SHIPYARDS



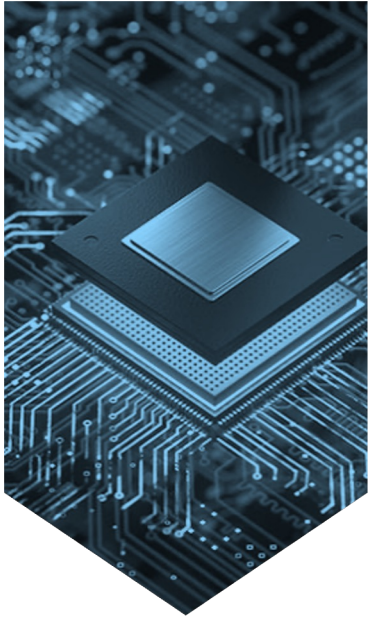
# Defence Capabilities

We Focus on Developing and Growing Local Defence Capabilities



# Defence Capabilities

WE FOCUS ON DEVELOPING AND GROWING LOCALLY EMERGING DEFENCE CAPABILITIES



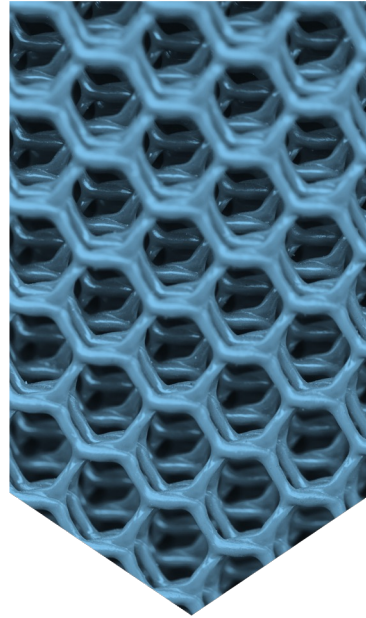
**ELECTRONICS &  
SENSORS**



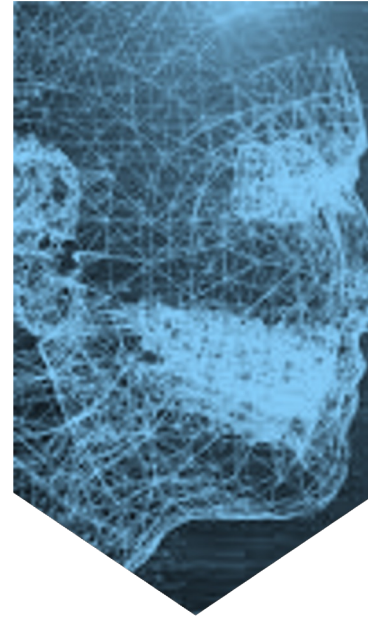
**ROBOTICS &  
AUTONOMOUS  
SYSTEMS**



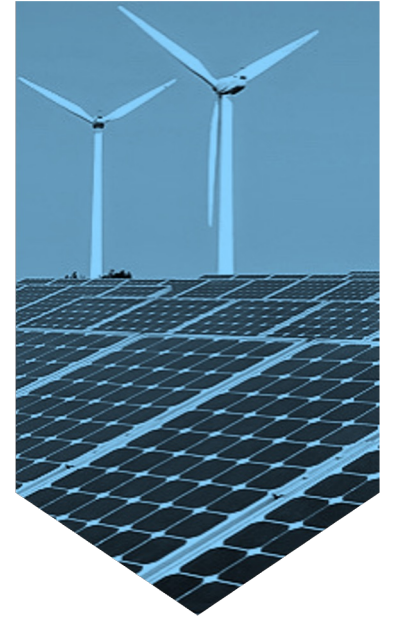
**SPACE &  
COMMUNICATIONS**



**MATERIALS &  
BIOTECHNOLOGY**



**ARTIFICIAL  
INTELLIGENCE &  
BIG DATA**



**SUSTAINABLE  
ENERGY**

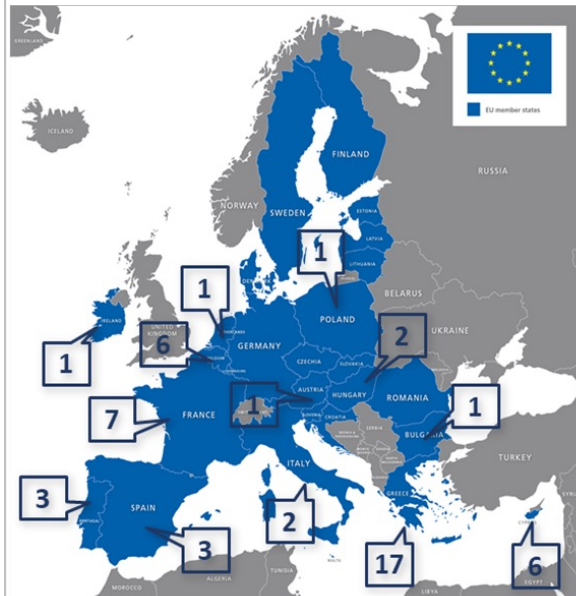
# European Defence Industrial Development Fund (EDIDP)

A Dynamic Entry of Cypriot Companies to the European Defence Industry in 2019



## Cyprus Participation Results of the Call 15.6.2020

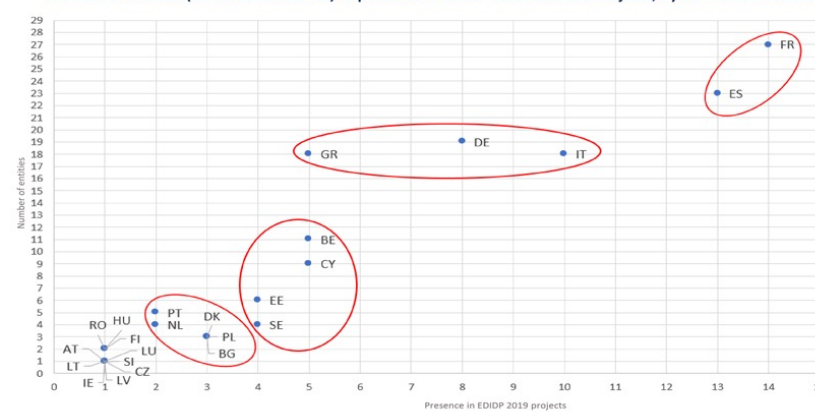
Strong Collaboration between 6 Cypriot organisations and 45 Defence Industry organisations from 12 European Countries



### Multiple Benefits for Cypriot Defence Capabilities

- Participation of Cyprus in the co-development of future European Defence products for the first time
  - Establishment of strong collaboration between the Cypriot Defence Industry and leading EU Defence companies
  - Establishment of strong collaborations between Cypriot and other EU MoDs
  - European funding for projects to develop future defence products that add to the Cyprus National Guard defence capabilities
- **DECISMAR**: Development of a Decision Support Toolbox for enhancing the feasibility study of the Upgrade of Maritime Surveillance through the integration of legacy assets with new innovative solutions
  - **LOTUS**: Low Observable Tactical Unmanned air System
  - **LynkEUs**: Upgrade of current and development of next generation ground-based precision strike capabilities
  - **PANDORA**: Cyber Defence Platform for Real-time Threat Hunting, Incident Response and Information Sharing
  - **SMOTANET**: Development of Software Defined Mobile Ad-hoc Tactical Network Devices and Testbed

Number of entities (Direct Beneficiaries) vs presence in EDIDP 2019 Selected Projects, by EU Member States



### Significant Success for Cyprus

35.7M€

Participation in Five of the Sixteen Successful Projects to receive Funding from EDIDP. Total Budget of these projects is 35.7M €

5

Projects  
Funded

3. M€

Six Cypriot Organisations including Five SMEs have total budget of 3. M€. This is a direct benefit for the Cypriot Economy. New high calibre Scientific jobs are projected to exceed 20

3.M€  
Injection  
to Cyprus  
Economy

1€ → 17€

Every 1€ spent by the Cyprus Government (MoD) returns 17€ to the Cypriot Economy. The Cypriot Horizon 2020 successful participation rate is at 1€ returns 3€

x17  
Return

The funded projects are of very high quality and target the development of future European Defence products. Four of the Five projects were ranked first in their category.

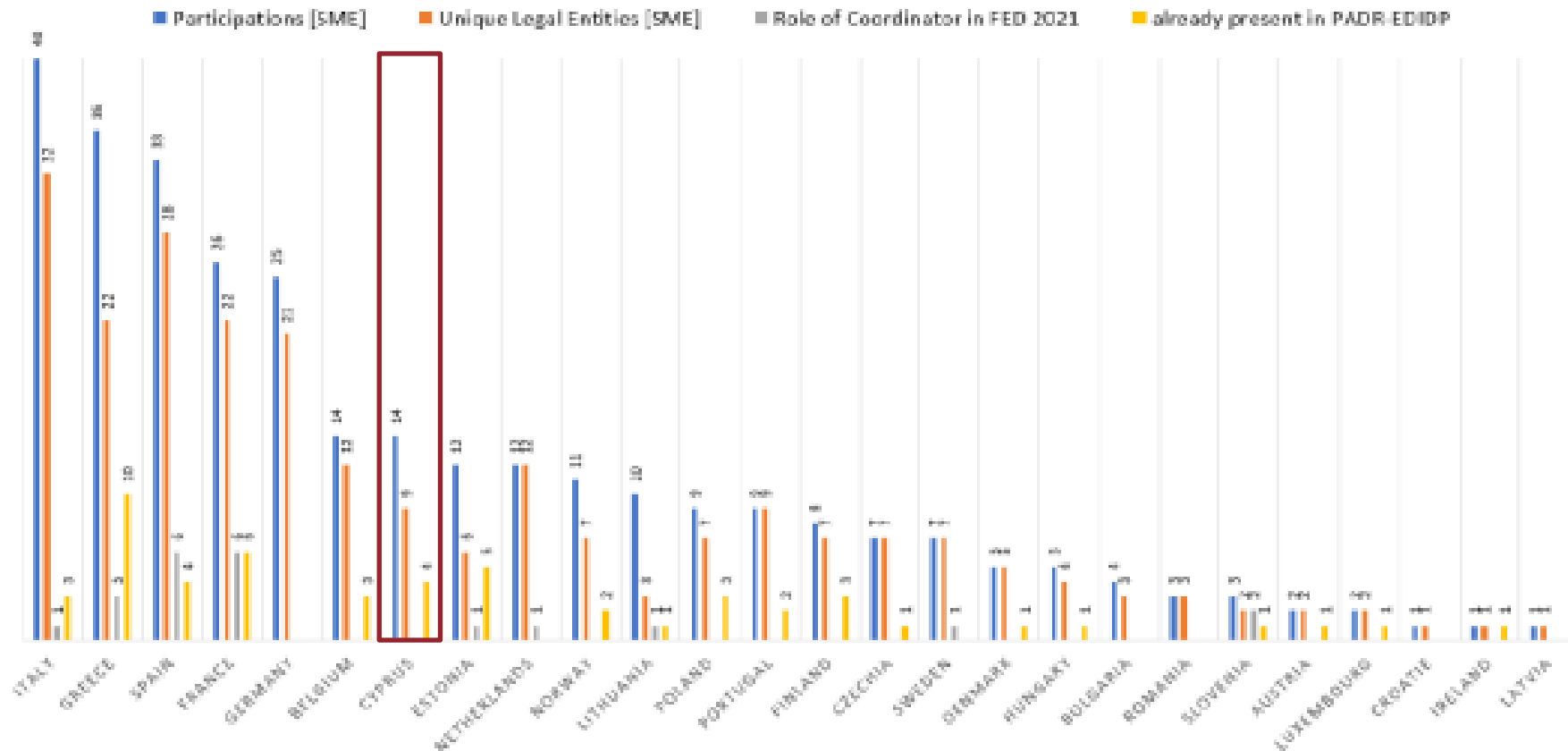
1st  
Ranking

# European Defence Fund (EDF)

Seven Projects, Nine SMEs for the development of European Defence Products



FOCUS on SME in EDF 2021 selected projects

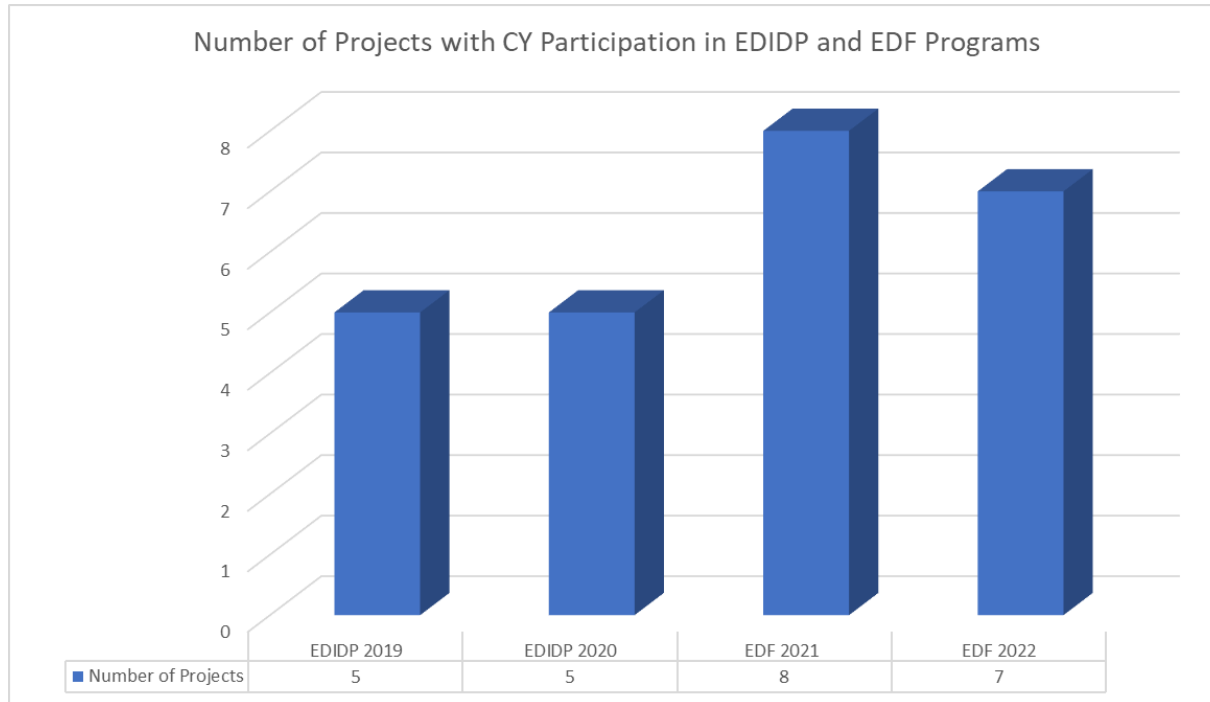


17 Defence R&D contracts with a total budget of 172.5M€

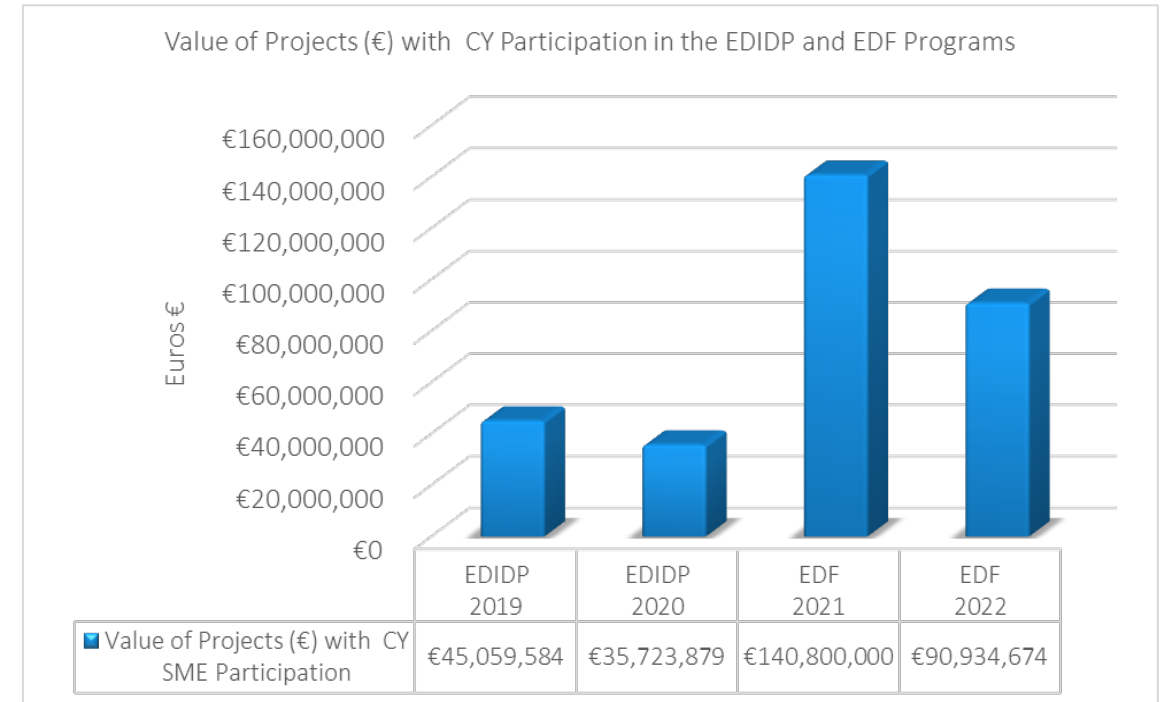


# European Defence Fund (EDF)

Fifteen EDF Projects, for the development of European Defence Products



Total Number of Funded Projects: 25



Total Value: 312 M Euros

# A Strong Network of Partners & Collaborators

Participation in Contracts with major EU Defence manufacturers



# International Defence Collaborations

Organisers /Co-organisers of Events for promoting the Cyprus Defence Industry



Defence Industry Day Greece – Cyprus



Defence Industry Day Cyprus – Greece – Israel



Defence Industry Workshop Cyprus



European Innovation Day 2022



DEFEA, Athens 2023



EUROSATORY, Paris 2022

# Partnerships and Collaborations

Reinforcing the collaboration between the Cypriot and the European Defence industries



The members of GICAN and CARIE are already collaborating in 9 EDIDP/EDF contracts of total budget 149.8M€



The members of HASDIG and CARIE are already collaborating in 7 EDIDP/EDF contracts of total budget 77M€



# Συμμετοχή στην μεγαλύτερη Ευρωπαϊκή Έκθεση Άμυνας

Το Μεγαλύτερο Κυπριακό Περίπτερο μέχρι σήμερα 200μ<sup>2</sup>



THE GLOBAL EVENT  
FOR  
DEFENCE & SECURITY



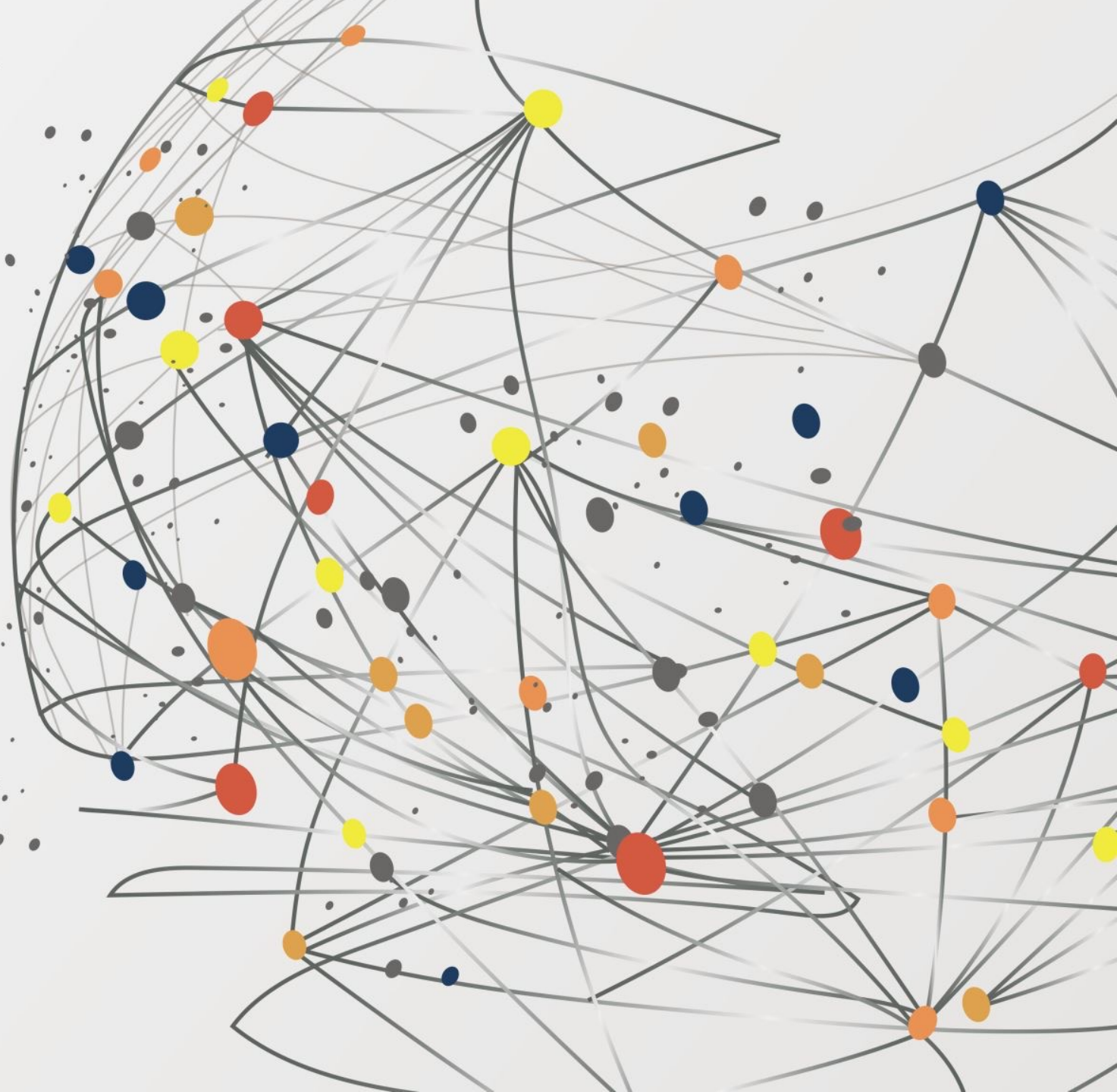
## SAVE THE DAY

**17.21** JUNE  
2024

PARIS

“By far, the greatest danger of Artificial Intelligence is that people conclude too early that they understand it.”

ELIZER YUDKOWSKY





# AUTONOMOUS SYSTEMS



# Benefits on Autonomous Systems and AI

Speed, Surprise, and Survivability

Increased accuracy and decreased collateral damage

Machine-like adherence to rules and law

Decreasing civilian harm

Removing humans from the battlefield

Decision Advantage

Empower the whole Force



# KNOW WHAT TO LOOK FOR

- WHERE DOES THE TRAINING DATA COME FROM?
- WHAT KIND OF DATA ARE YOU TRAINING YOUR MODEL ON?
- WHO IS THE MODEL DEVELOPER/DATA SCIENTIST?
- WHO ELSE HAS ACCESS TO THE MODEL?
- WHO HAS ACCESS TO YOUR PIPELINE?



# AI & Human - Ensuring humans are in the loop

Collect results and up-to-date data to provide continues AI algorithm training

## Data

- The human operator selects the unbiased data; the AI sorts and classifies the data

## Insights

- The AI finds patterns and outliers using the most efficient process for the human

## Inferences

- The AI makes suggestions based on human operator defined rules

## Judgment

- The human operator determines the best course of action based on the context of the situation

## Action

- The human operator executes the decision or directs the AI to act

# Scaling AI to achieve long-term success in organizations



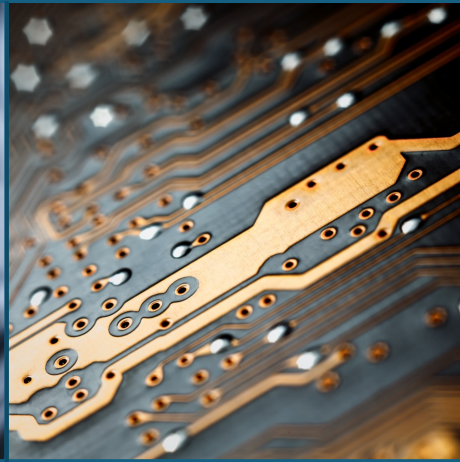
## Strategy

- Develop a strategy to ensure AI is adopted and provides measurable success to the organization



## Process

- Ensure processes are in place to procure solutions and govern the ethical use of AI



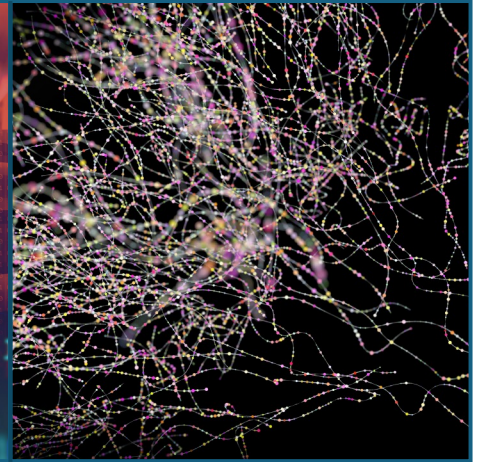
## Technology

- Procure Technology solutions that are trusted and secure



## Data

- Use data that is unbiased and can be used to inform algorithms



## People

- Enable a workforce that can nurture and develop AI capabilities

# Defence and AI Products by Cyprus companies

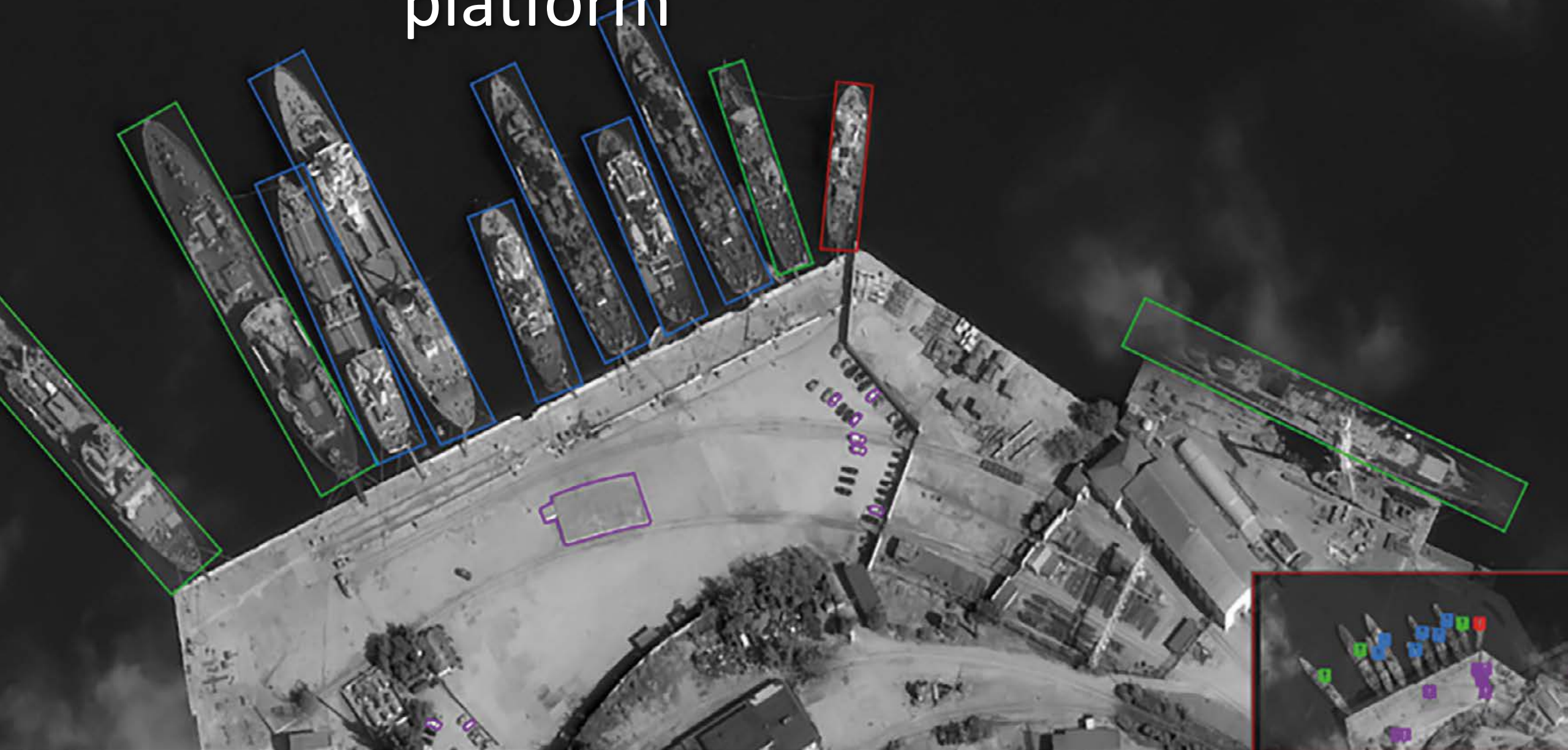


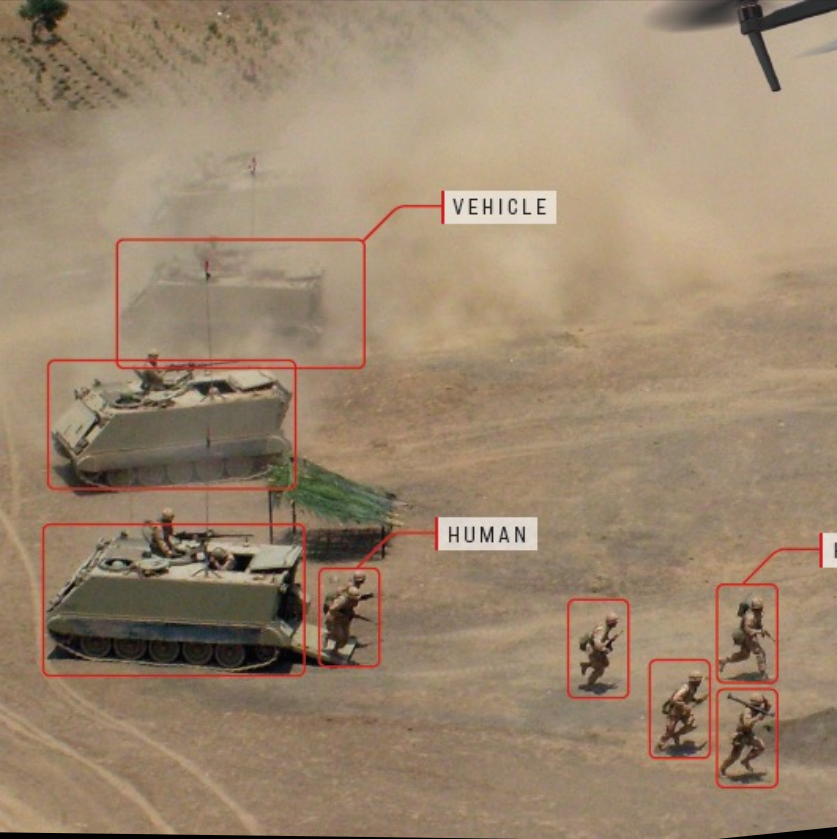
# Cyprus Defence Industry Products

DESIGNED, DEVELOPED AND PRODUCED IN CYPRUS



# Earth Observation intelligence platform





ZEUS - Portable Command and Control station and drones with edge AI capabilities for detection/identification and targeting



# FORCE MULTIPLIER

▶ ARTIFICIAL INTELLIGENCE

▶ AUTONOMOUS



**CARIE**

CYPRUS ASSOCIATION OF RESEARCH  
AND INNOVATION ENTERPRISES



**THANK YOU !**

