Public-Civil Society Partnerships Transforming Military Capability of Ukraine

June, 2025

STARTING POINT

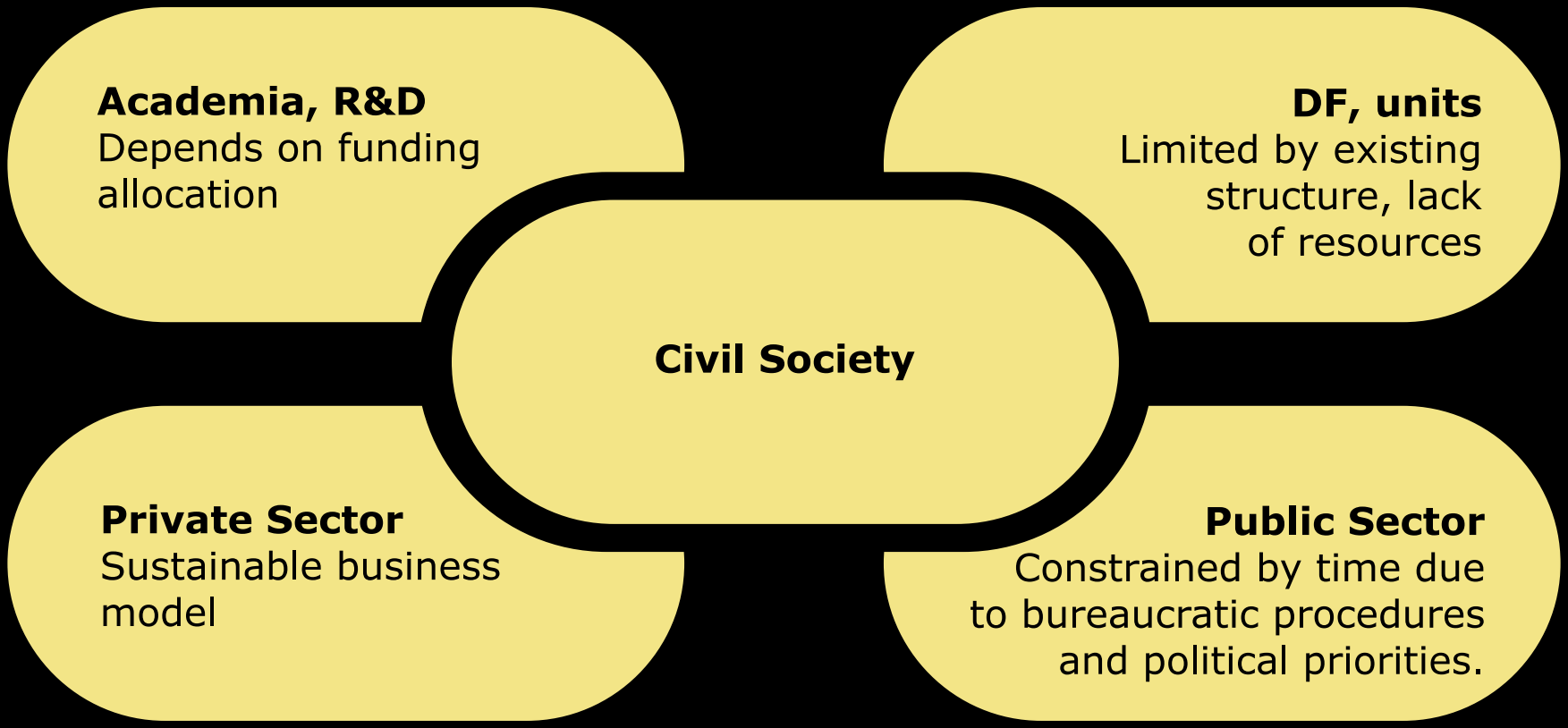
‘In terms of ammunition, Russia produces in three months what the whole of NATO produces in a year. And its defence industrial base is expected to roll out 1,500 tanks, 3,000 armoured vehicles, and 200 Iskander missiles this year alone…

Russia could be ready to use military force against NATO within five years’

Mark Rutte, NATO chief

KEY QUESTIONS:

- WHAT DEFINES THE MODERN BATTLEFIELD?
- HOW CAN WE ENSURE OUR DF, DOWN TO TACTICAL UNITS, UNDERSTAND THE BROADER CONTEXT OF MODERN WARFARE, INCLUDING STRATEGIES, TECHNOLOGY, AND TACTICS, BEYOND JUST THE PHYSICAL BATTLEFIELD?
- HOW IS THE STRUCTURE OF DF AND UNITS ORGANISED IN RELATION TO MODERN WARFARE?
- WHAT ARE THE REQUIREMENTS?
- IS THERE DIRECT COMMUNICATION BETWEEN END USERS AND PRODUCERS?
- WHAT ARE PROCEDURES TO ENSURE CONSTANT INNOVATION?
- WHAT IS OUR INDUSTRY READINESS?
- HOW DO WE TRAIN OUR PEOPLE?
- IS THE SOCIETY READY FOR THE WAR?


Academia, R&D
Depends on funding allocation
DF, units
Limited by existing structure, lack of resources
Civil Society
Private Sector
Sustainable business model
Public Sector
Constrained by time due to bureaucratic procedures and political priorities.

WHO WE ARE

An official non-profit organization
established in 2014
90+ members

A community of partners
in IT and robotic technologies sector
the largest IT companies of Ukraine, the Center of Innovation and Defense Technologies Development of the Ministry of Defense

A community of experts
400+ within the perimeter of operations

An organization in contact and interaction with the military and representatives of NATO countries

A community of veterans
and active military personnel (50%+ uniformed: almost all forces)

An organization in partnership
and recognized by the Government of Ukraine

WHO WE ARE

Mission: To support the development of network-centric and robotic capabilities of the Security and Defense Forces of Ukraine, thereby systematically enhancing their overall effectiveness, through the engagement of civil society and the establishment of conditions for coordinated action with all relevant stakeholders.

Vision: Security and Defense Forces of Ukraine **transformed to meet the standards of a NATO defense complex, incorporating the experience acquired during the war with russia**, which enable effective resistance to the russian threat.

STAGES OF OUR HISTORY

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
History of the community	War of russia against Ukraine Start of the Aerorozvidka community	Military unit A2724 is founded	Cooperation with the NATO C4 Trust Fund				Military unit A2724 is liquidated NGO "Aerorozvidka" is founded	Centre of innovation and development of defence technology is founded			
Robotic Systems		Start of development of the first UAV				Using R-18 in combat conditions of the ATO			R-18 has been accepted for armament in the UAF	Development and successful testing of the guided munition for the UAV	
C2IS		Supporting DELTA development	First prototype in A2724	NATO TIDE Hackathon / NATO TIDE Sprint 1e place Joint Challenge 1e place Coding Challenge 1st place Modeling Challenge						Delta is authorized for use by Security and Defense Forces with a special Government decree	Receiving certification for information protection (KSZI) and DELTA launch
				NATO CWIX							
				MIP4-IES compatibility testing						VIP demo, compatibility testing	
ISTAR										Kyiv SC (Situational Centre) SC-s along the front line of combat	Creation of the ISTAR Department in the UAF 300 ISTAR centres at different levels in the Security and defense Forces of Ukraine
Knowledge Management										Courses on C2IS and ISTA 10 first case studies of the combat experience Prototype of the C4I CoE	

Evolution of directions

Providing strategic capabilities to a tactical level

KEY PRIORITIES

C2IS

(Command Control Information Systems)

Information Systems
- Situational Awareness
- Command and Command
- Analytics and Artificial Intelligence

ISTAR PROCESS

(Intelligence, surveillance, target acquisition and reconnaissance)

Integration of ISTAR practices and tools

Increasing effectiveness of targeting and intel processes

Integration of the Situation Centers, created at the NGOs initiative, into the ISTAR unit and making it a part of DF

Knowledge Management

Studying the unique experience gained by our military and applying it to:
- Dissemination of successful tactics
- Training of service members
- Doctrine development and adaptation

Robotic Systems

Supporting the development of autonomous systems to reduce human involvement in direct combat

DELTA. SITUATIONAL AWARENESS SOLUTIONS AND SERVICES

DELTA

АЕРОРОЗВІДКА

Functionality

The Delta integration platform provides comprehensive situational awareness tools and services to achieve operational advantages

- Real-time tracking of enemy forces in the air, on land, at sea, and in cyberspace
- For recognition, planning and coordination of tactical and strategic multi-domain operations
- For comprehensive situational awareness

Technologies and standards

Cloud based | AI | Video streaming | Open API | Zero Trust Security | FIDO-2 tokens | MDM

ECOSYSTEM

Delta.Monitor
COP system

Delta.Monitor.App
Mobile Application for COP system

Vezha
Video streaming platform

Delta.Intelligence
Investigative and Reconnaissance AI-driven platform for real-time identification, verification and tracking of enemy forces

Mission Control
NATO Sync Matrix for planning and control UAV-missions

Element
Secure messenger

Interoperability and Data

Battlefield management system | Radars | Commercial Satellites | Satellite trackers | Destruction Weapons | Robotic systems and trackers | Chat-bots

CWIX interoperability tested with:

DELTA and NATO exercise:

In June 2019, an unprecedented event occurred as non-NATO country's SOF-unit from Ukraine, employing Delta,received certification to join the **NATO Rapid Reaction Force**

Delta team wins: NATO EA Hackathon 2017, NATO TIDE Hackathon 2018

OUR STRATEGIC AREAS OF FOCUS - ISTAR PROCESS IMPLEMENTATION

Challenges in optimising the deployment of the intelligence collection tools

A multitude of intelligence sources and the sheer volume of information

For example, only in COMINT 5 mln recordings per day

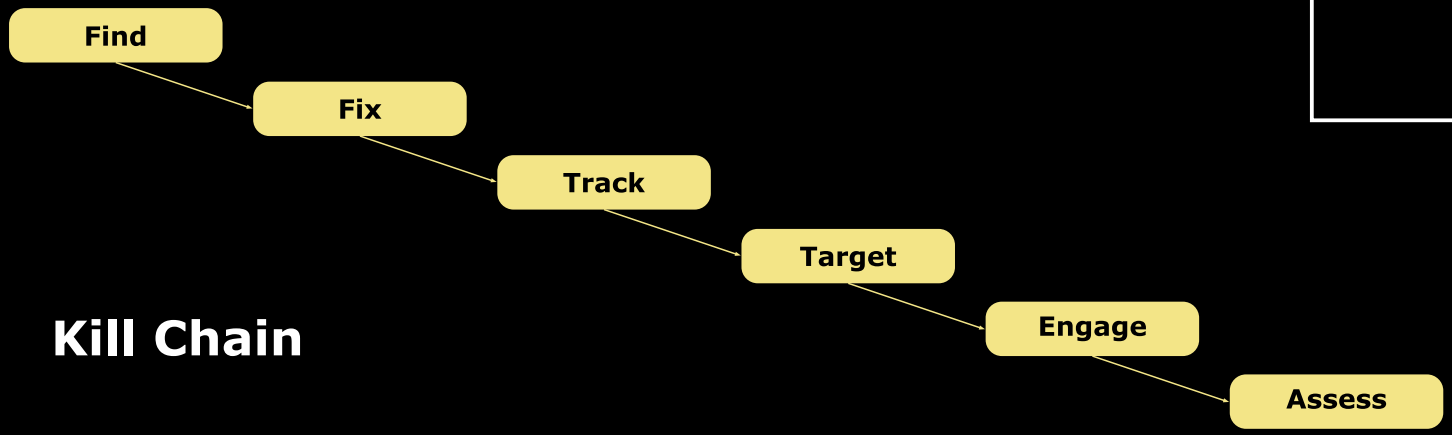
The battlespace is transparent

The speed of decision-making based on data acquisition, and the planning of strike engagement

Time for combat engagement decreased form 3-24h to 5-7 min

Target engagement

- 30% by artillery
- 70% UAVs



Kill Chain

OUR STRATEGIC AREAS OF FOCUS ROBOTIC SYSTEMS DRONE ID

Project Objectives
The launch of a standardized data and command exchange between robotic systems and the DELTA situational awareness system.

Impact on Ukraine's Defense Capability
Centralized UAV Command and Control:

- Real-time identification and tracking within DELTA
- UAV performance analysis
- Enhanced UAV mission planning
- UAV lifecycle management

Key Tasks:

- Development of the communication protocol, reference documentation, and SDK
- Creation of a regulatory framework
- Support for protocol adoption by UAV manufacturers

Achievements

Proof of Concept Complete

Solution is integrated in Delta

OUR STRATEGIC AREAS OF FOCUS - KNOWLEDGE MANAGEMENT

Strategic objective:

- Prototyping Centre of Excellence For Robotic Operations in partnership with MoD
- UAVs (Unmanned Aerial Vehicles)
- Ground robotic systems
- Surface (subsurface) robotic systems
- Automated combat control systems (including artificial intelligence)

Activities

- LI/LL for robotic operations
- Defining training needs and developing training programs for units and military academies
- Facilitating testing and providing feedback for producers
- Solution concept development and verification based on capability development approach

Robots, not humans, should fight on the battlefield

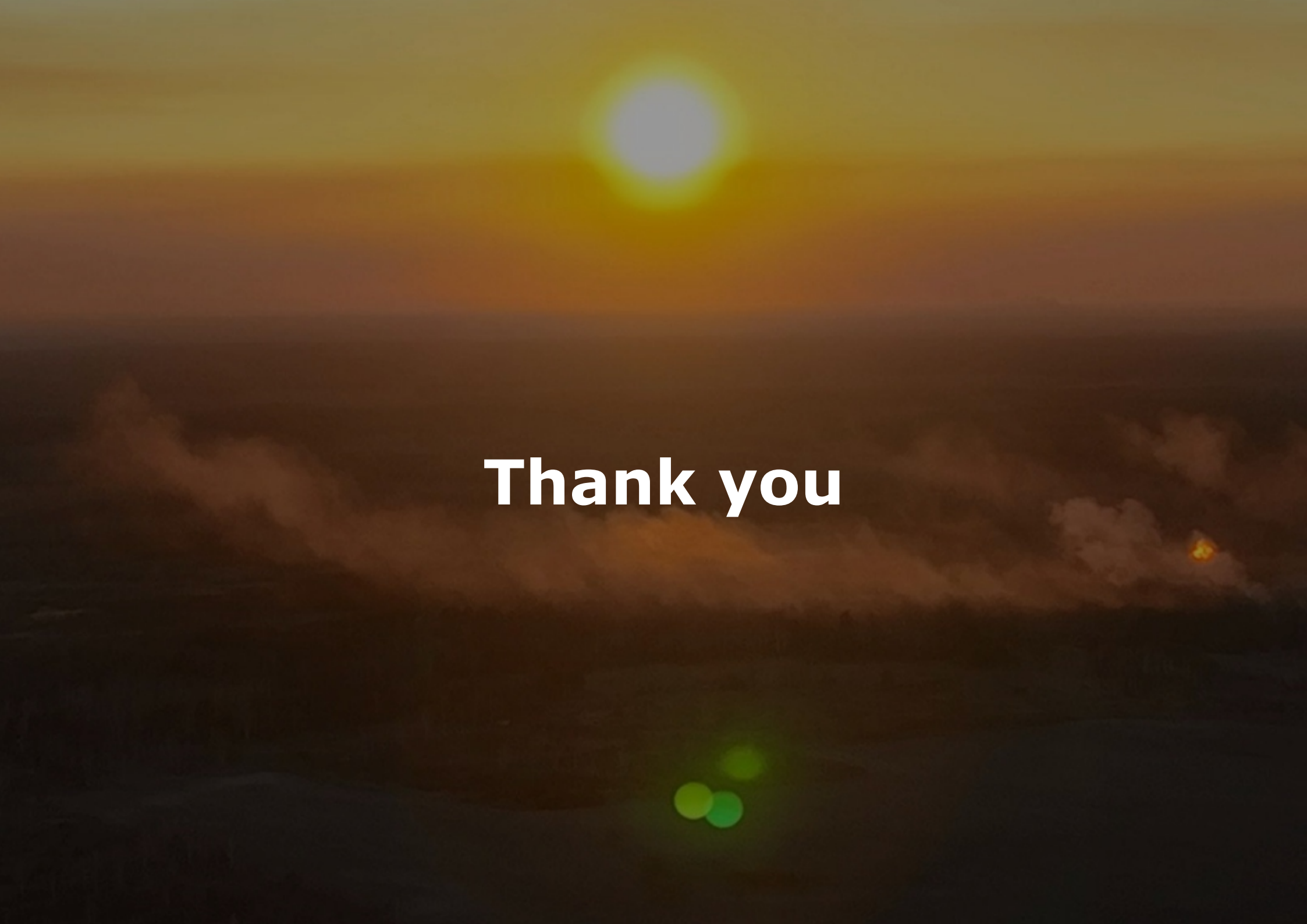
Our goal is to be a driver in integrating new technologies, approaches, and tactics into robotic operations.

UKRAINIAN NGOS

Reform Support Office
Dignitas
Boreviter

Dronarnia
DrukArmy
Come Back Alive Foundation

Serhiy Prytula Foundation
Serhiy Sternenko Foundation
Technological Forces of Ukraine


Thank you