



# Ukraine's Frontline Lessons For Northern Security

**REFORMS  
SUPPORT**  
Ministry of Defence  
of Ukraine OFFICE

# Defense Ecosystem:

## The Key to Innovation Development

**DEFENSE** is an open ecosystem in which cooperation between different stakeholders and the free flowing exchange of ideas is imperative.

**STATE ACTORS:** [MOD, Ukrainian Armed Forces, International allies and partners.]

**NON-STATE ACTORS:** [Civil society, Business, Individual volunteers, Academia, Innovators, Church, Analytical Centers, Media, Local communities.]



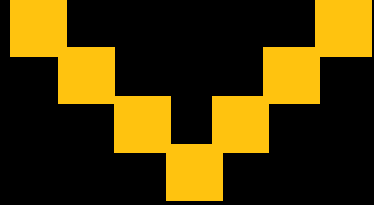
## **The Reforms Support Office**

an advisory body to the Ministry of Defense of Ukraine,  
bridging military and civilian expertise.



**Institution-Building**  
**Analytical Expertise**  
**Defense Policy development**

# What kind of enemy you are facing?



## 1. They scale rapidly

*115-130 ballistic missiles* per month and *153 drones (Geran))* per day.

2. **They innovate :** *Unmanned Systems Development: "Rubicon"*. The goal is to have ~210,000 military personnel by 2030 (more than Ukraine's army before the full-scale invasion) and over 6 million FPV and strike drones by 2034.

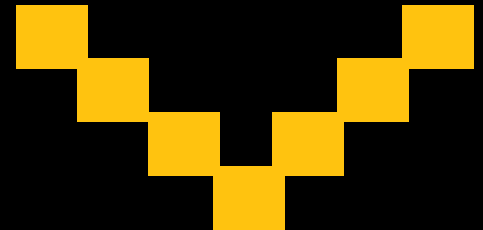
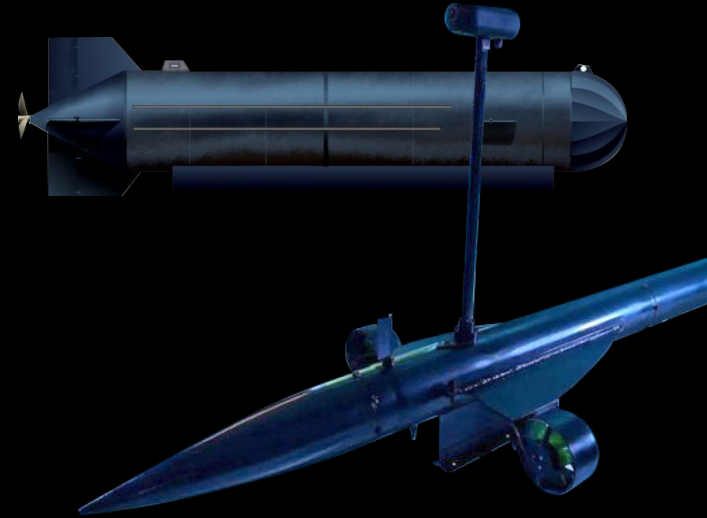
## 3. They master infrastructure attacks

The experience Russia is gaining in Ukraine will be used to create threats directly to the economy and security of Northern European countries.

# Lesson 1

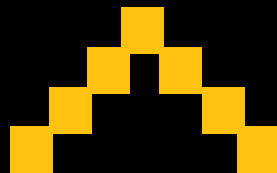
## Innovation Defeats Superiority: Asymmetric Defense

- **Innovative tactics:** development of new naval drones (MAGURA V5, Sea Baby) and pioneering approaches to their deployment has changed the rules of naval warfare.
- **Relentless effectiveness:** continuous, massive attacks with naval drones have struck about 30 Russian vessels, paralyzing enemy fleet operations in the Black Sea.
- **Surprise as strategy:**  
Unpredictable, high-impact strikes (like “Spider Web” operation by SSU) disrupt conventional defense paradigms.





- **Unmatched maritime sabotage capabilities**, as demonstrated by SSU's Crimean Bridge operation with advanced submersible drones (e.g. Marichka) to target underwater supports





- Ukraine's recent strikes on Russian bombers and Crimean bridge demonstrate **evolving warfare dynamics requiring more agile defense systems**. Russia will likely respond with next-generation technology including advanced sensors, electronic surveillance, and full-spectrum jamming capabilities against drone-guided operations.



- **Everything works together:** Today's operations combine air, sea, and underwater capabilities to be effective.
- **Reach far and supply smart:** Drones can access distant regions, allowing for strikes deep into enemy territory and bringing essential supplies to remote bases in harsh environments.

**Ukraine is a world leader in UAV development,** combat use, and countermeasures in modern warfare—expertise that's directly applicable to Arctic security challenges.





# Accelerated technology cycles in warfare

Time is running faster on the battlefield and technologies must be updated in an endless cycle.



**Infrastructure for innovation at the battalion and company level includes:**  
budgets + people + authority + motivation + bypassing the bureaucracy

## Lesson 2

Air Defense that must be cost effective and capable of protecting vast territory

**Ukraine develops a multi-layered Air Defense System adapted to high-intensity attacks combining:**

- traditional layered air defense capabilities (for anti ballistic missiles)
- aircrafts used for mid-air interception of missiles and UAVs
- mobile fire units
- helicopters for shooting down Shaheds,
- electronic warfare systems, disrupting missiles, glide bombs, and drones
- interceptor drones, which are revolutionary cost effective solution (2.5 k per unit VS 35k Geran)

**All this diversity of instruments exists within a single system.**





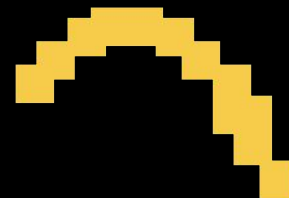
# Procurement evolution



# FROM 2022 TO 2024 WE ARE OBSERVING THE INCREASE OF PROCUREMENT APPETITE OF THE DEFENSE SECTOR AND GREATER MATURITY OF THE ACQUISITION PROCESS

**Centralized procurement** is performed by 3+ main agencies to cover the needs in lethal and non-lethal product.

All agencies are buying both from local and international markets.

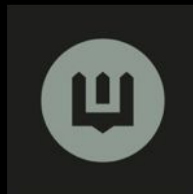


## CENTRALIZED PROCUREMENT (EUR)

2022	–	1,19 bln
2023	–	1,89 bln
2024	–	4,7 (planned) bln



State Operator for  
Non-lethal Acquisition



Defense  
Procurement  
agency



State Service of Special  
Communications and Information  
Protection of Ukraine.

# STREAMLINED DEFENSE PROCUREMENT: NEW OPPORTUNITIES FOR GLOBAL PARTNERS

## New procurement architecture Ministry of Defense of Ukraine

**DOT**

What does State Operator for  
Non-Lethal Acquisition buy?



What does the Defense  
Procurement Agency buy?



- \* Defense Procurement Agency (DPA) prioritizes direct procurement from national and international manufacturers.
- \* 20+ direct contracts signed with defense producers from 10 countries in 2024.
- \* €680 million invested in UAV procurement in 2024.
- \* DPA offers streamlined procurement for battle-proven solutions from international manufacturers

Ukraine's *decentralized procurement model* enables rapid fielding of new weapons systems, allowing defense Forces to quickly respond to emerging threats and evolving battlefield conditions.

## MILITARY UNITS ARE BUYING

Can be bought and delivered in 2 weeks or even faster

- DRONES
- EW
- VEHICLES
- UGV
- EQUIPMENT

**Budget doubles every year**

**2024:** 1, 27 bln EUR



# CIVIL SOCIETY FOUNDATIONS PROCURING

Foundation 'Come Back Alive'  
procured the necessary military  
equipment for **more** than

**220+**  
MILLION EUROS



# Practical steps of Danish cooperation with Ukraine



- **Collaborative Defence Procurement**

*The Danish model* of defence industry partnerships has proven highly successful.

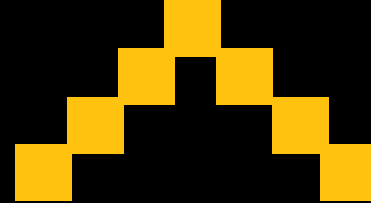
This approach has delivered €538 million worth of weapons to Ukrainian forces in 2024 alone.

Ukraine launched ZBROYARI fundraising campaign to replicate this approach with multiple countries. The campaign has raised \$1.5 billion from 9 nations, with Denmark contributing \$215 million as the pioneering partner.

Ukraine and Denmark can now participate together in the *EU SAFE Instrument's* collaborative procurement projects, accessing up to €150 billion in guaranteed loans for joint defence investments.



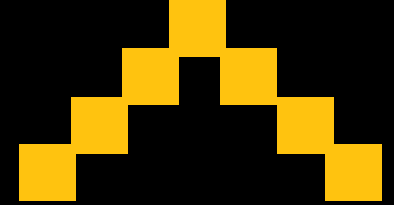
# Practical steps of Danish cooperation with Ukraine



- **Industrial Modernization Support** through Danish know-how sharing, manufacturing expertise transfer, and technological solutions for Ukrainian defense sector transformation and capacity building.
- **R&D Investment Programs** through bilateral funding mechanisms and collaborative research in defense technologies and dual-use innovations.



# Practical steps of Danish cooperation with Ukraine



- **Joint ventures**

*State Investment Guarantees* - Danish government provides €130M through EIFO covering up to 70% of Danish companies' investments in Ukrainian defense enterprises.

*Defense Industry Hub in Kyiv* - a joint public-private platform at Danish Embassy, facilitating strategic partnerships, direct procurement from Ukrainian defense industry, and supporting Danish companies' market entry.

*Ukrainian Defense Industry &  
Danish radar specialist Weibel Scientific  
collaborate on the development and production of  
advanced radar systems*



**CASE OF:**

# BRAVE<sup>1</sup>



**UKRAINIAN DEFENSE  
INNOVATIONS**

accelerates the  
development of new  
defense technologies  
for Ukraine

serves as an entry  
point for investors  
into Ukraine's

serves as an entry  
point for investors  
into Ukraine's defense  
tech sector



**SWARMER**



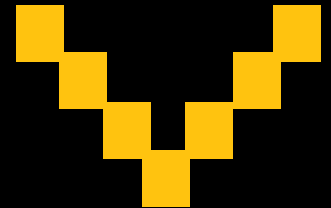
**FARSIGHT**

all investments  
happen directly  
between investors  
and the companies



**While Ukraine  
fights,**

**Europe must  
prepare**





THANK YOU  
FOR YOUR ATTENTION

**REFORMS**  
**SUPPORT**  
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of Ukraine OFFICE

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