



Estonian Defence
and Aerospace
Industry Association

defence
estonia

Ukrainian war impact on innovation within the Estonian Defense Industry

ESTONIAN DEFENCE & AEROSPACE INDUSTRY

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Agenda

- Estonian Defence and Aerospace Industry Association
- Innovation processes during peace and war time
- Dual use of technology
- Ukrainian references
- Conclusion
- Q/A

Estonian Defence and Aerospace Industry Association (EDIA)

The logo for defence estonia, consisting of the words "defence" and "estonia" stacked vertically in a white, lowercase, sans-serif font, set against a solid blue square background.

MISSION:

Our mission is to support Estonia's **defense capability** and create better opportunities for **our members within the defence industry markets.**

- EDIA was **founded** in **2009**.
- **130 members** - 100% privately held local SME's. Mostly early-stage or growth stage companies.
- Total revenue around **200Meur**.

Capabilities represented in EDIA



Border Security
& Surveillance



Communication
Systems



Cyber Defence &
smart software



Electronic
Warfare & C-
UAS Systems



Military Medicine



Military Vehicles
& Armament &
MRO



Personal
Equipment



Protection
Systems



Robotics &
automation



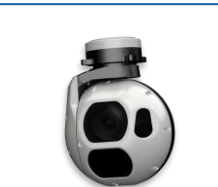
Shipbuilding



Simulation &
Training Systems



Weapon
Systems



Sensor
technologies



Space
technologies



- Innovation is the creating and use of new ideas or methods

Innovation process (war vs peacetime)

Peacetime	Wartime
FullHD autonomy and empowerment for teams	Command & control
Long term investments	Short term wins
Pay off debt and leave things better than you found them	Whatever it takes
All teams have their own lanes, metrics, missions and dependencies are minimized	All-hands-on-deck to shoot at a common target
Research, analysis, investing in learning	Instinct and action
Big picture, zoomed out	Ultra-focused, zoomed in
Consensus	Mandate and fiat

"Peacetime"

Little to no pressure

Quality is essential

Work-life-balance

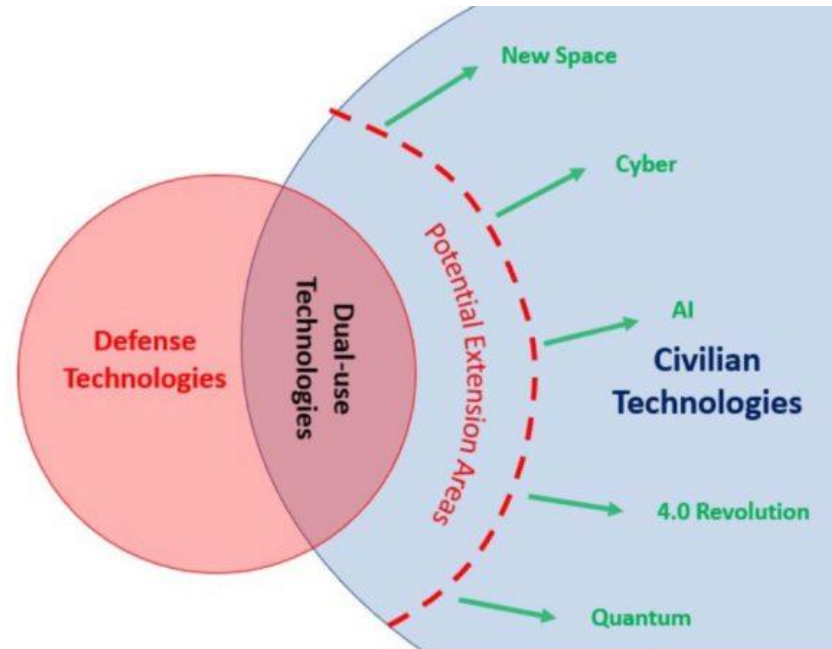
"Wartime"

Existential pressure

Speed is essential

Work-life-what?

Dual-use technology



- In Ukraine innovation has adopted civilian capabilities for supporting combat activity.

Our production

- AI and machines learning algorithms to detect, recognise, and target a variety of drones
- Creates software where an abundance of data transforms into actionable knowledge
- AI-powered surveillance solutions
- Operational support in incident handling & cyber operations
- Unmanned platforms
- Drone detection and jammers
- Support for a wide range of surveillance devices (radars, cameras and other sensors)

Ukrainian war references



Russia-based Centre for Analysis of Strategies and Technologies said last week it was offering a reward of up to 1 million rubles (\$16,330) for the Tracked Hybrid Modular Infantry System unmanned ground vehicle, or THEMIS.

<https://defence-blog.com/russia-offers-1-million-rubles-for-capture-of-estonian-made-unmanned-ground-vehicle/>

German arms manufacturer Rheinmetall will send several dozen million euros worth of Estonian company Defsecintel's surveillance devices to Ukraine.

<https://www.reuters.com/business/aerospace-defense/rheinmetall-supplies-ukraine-with-more-drone-reconnaissance-systems-2023-10-05/>

СИСТЕМА SURVEILSPIRE **NV NEW VOICE**

DEFSECINTEL®
Естонія

- на озброєнні з 2021 року
- екіпаж 3 особи
- операційна дальність 30 км

Система використовує для спостереження і невеликі дрони, які можуть працювати у повністю автономному режимі від ініціації запуску до визначення цілі

Бездротові канали зв'язку за допомогою 4G і Starlink

Завдяки сонячним панелям може безперервно працювати без кабелів живлення або палива

Проста у транспортуванні платформа – можна перевозити навіть легковим автомобілем

Денні та нічні камери на вежі забезпечують цілодобовий моніторинг території на відстані до 30 км

Для обробки даних спостереження використовується технологія штучного інтелекту, які істотно спрощують роботу операторів

A diagram of the SURVEILSPIRE system. It shows a drone in flight and a ground station on a vehicle. The ground station has a large antenna and a camera. The drone is connected to the ground station by a wire. The diagram is surrounded by text describing the system's features and capabilities.



Conclusion

- Innovation has accelerated due to the War in Ukraine
- Innovation processes have become more efficient
- Time has great value
- Competition fight between means and counter means
- We have to work harder, create more and provide new solutions



Estonian
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Association

+

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