

Onko NATO "uusi Nokia"

Liikenteen kasvufoorumi Sauli Eloranta 23.1. 2025

24/01/2025 VTT – beyond the obvious



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What is new in NEW DEFENCE?





Needs for New Defence

- Fast-growing Defence market
- Technology intensiveness
- Lack of smart systems
- Need for faster innovation
- Dual-use technology potential





Paradigm shift – What is New Defence?



NEW DEFENCE

DIGITAL DEFENCE ECOSYSTEM

ESTABLISHED DEFENCE

Traditional defence primes with exclusive supply chains	PLAYERS	Growing number of dual-use and start-up companies
Set by governmental entities, focus on national defence and industry policy	AGENDA	Set by new players, especially private companies, with a focus on purpose, business, and exports
Long-term strategic partners for defence forces	TYPICAL ACTOR	Civilian dual-use tech companies, proactive consortia and ecosystems
Defence administrations	FUNDING	New investors, NIF, EIB, DIANA, EUDIS, EDF, BF, private equity funds
Slow pace, inertia, difficult procurements, high barriers to entry	MODE	Speed, agility, experimentation, new mechanisms and initiatives to lower entry barriers
10+ years	DEVELOPMENT CYCLES	Only months or even weeks
Defence administration within its own bubble	COLLABORATION	Seamless collaboration across defence and civilian administrations, industry, and research
From defence to civilian applications	INNOVATION FLOW	From civilian to defence applications (drones, space, Al)
Controllable, deterministic	NATURE	Uncontrollable, evolutionary

Will New Technology disrupt or coexist?





CIVILIAN









DEFENCE









Finland's DIANA Proposal

The Next Generation Communications and Quantum Accelerator

- Main focus is to accelerate development of new deep tech and dual-use innovations and businesses in the fields of 5G/6G, quantum and space.
- Coordinated by VTT, in collaboration with central international, national and local organisations that are involved in accelerator activities.
- Secure Connectivity, Space and Quantum Test Centre (SCSQ)
 - Test Centre with secure connectivity, space and quantum technology facilities for dual-use testing, coordinated by VTT.
- 6G Test Centre (6GTC)
 - 5/6G Test Network, with services, facilities, and processes jointly provided by the University of Oulu and VTT.

Collaboration:









DIANA

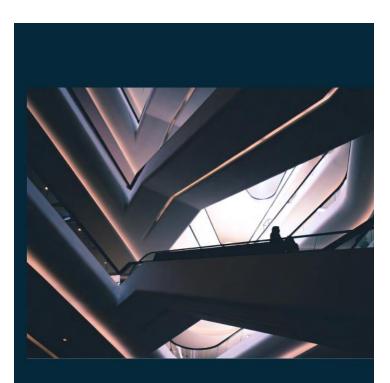
VTT



Nato Logistics Topics, Examples

- Military mobility
- Supply chain and logistics
- Digital transformation
- Local manufacturing
- Automation & robotics
- Energy and propulsion technologies
- Energy transformation and fuels

Nato Information



Nato ja teollisuus

Opas suomalaiselle teknologiateollisuudelle





PUOLUSTUS- JA ILMAILUTEOLLISUUS PIA RY





Defence / Military Mobility

Opportunities

- US DoD <u>Defence Innovation Unit</u>
- Nato DIANA Challenge Programme
- Nato Allied Transformation & Nato Tide Sprint
- Nato <u>STO</u> groups
- Nato <u>NIAG</u> studies
- European Defence Fund
- BF Defence & Digital Resilience Programme
- ICE Pact Programme



Support

- VTT (Technical support, RDI projects, EDF, Nato DIANAetc.)
- Business Finland (RDI funding)
- Tesi (investments)
- FiBAN (investments)
- Finnish Defence and Aerospace Industries <u>PIA</u>
- Digital Defence Ecosystem <u>DDE</u>
- DEFINE Defence accelerator in Riihimäki
- BF defence industrial counselor in the US
- Regional and municipal business support



Summary

- Military logistics benefit from dual-use technologies that have been developed in civilian companies
 - Energy transformation increases self-sufficiency
 - Civilian shipbuilding has a defence aspect (ICE Pact)
 - Data intensive services will enhance military operational efficiency and situational awareness
- Utilize available support to enter the complex defence market
- Try out and enter the fastest growing business

