



VTT

# Suomen puolustussektorin viennin näkymiä – Case VTT

11/05/2023 VTT – beyond the obvious

# Puolustussektorin ratkaisujen ja kaksoiskäyttöön soveltuvien ratkaisujen vienti – VTT:n rooli

- VTT:n palvelu puolustusteollisuuden yrityksille ja puolustushallinnolle on soveltava tutkimus ja teknologian kehitys
- VTT:n myynti puolustusteollisuuden yrityksille on voimakkaassa kasvussa
- EDF-hankevalmistelu voimakkaassa kasvussa, avaa ovet eurooppalaisiin puolustusteollisuuden suuryrityksiin
- F-35 IIP -projektien merkittävä osuus
- NATO-jäsenyyden mahdollistama syvempi yhteistyö ja niiden pohjalta uudet kaupalliset mahdollisuudet

# Data Link Lab as a Service (DLLaaS) Data Link Research Infrastructure

Implemented in VTT's RF anechoic chambers in Otaniemi, Espoo

- Building a new VTT research facility to support R&DI work on **data links** and **critical communication** for **defsec** as well as critical infrastructure industry
- Enabling security **classified** research and testing
- Shared infrastructure to support Finnish industry, academia, and other stakeholders in R&D work and to strengthen European wide collaboration
- Supports PIA / AFDA member companies and Digital Defence Ecosystem (DDE) projects
- Linkage to other VTT research infra (5G/6G test network, QKD test facility, War Room, microelectronics facilities, etc.)
- VTT will invest 1 M€, for which Business Finland provides additional 1 M€ funding from EU RRF
- Antenna development focusing on mm-range
- RF and optical data transmission, transfer and connectivity protocols and traffic patterns related to radio and optical links
- Satellite equipment, such as radar, cameras and SW defined payload solutions, air interface testing, RF signal interference such as terrestrial mobile network and satellite communication
- Cyber security solutions for data links, such as encryption algorithms, key distribution, signal jamming and hijacking, datalink hijacking
- SW radio management and use, AI based smart management and control programmes for data links and network infrastructure
- GNSS-signal jamming and spoofing and their mitigation

# DLLaaS update 9.5.23

- Company collaboration
  - Discussions with companies to collect information about their needs - completed
  - First discussions about company cases – on-going
- Space renovation – on-going
  - Planning the premises
  - Listing the infrastructure to be purchased; first calls for tenders to be launched before summer holiday season
- DLLaaS in full use for *company cases*, *VTT PoCs/demos* - autumn 23
  - Are there needs/ideas for PoCs/demos in current activities/projects where DLLaaS could be of help? Feel free to share your thoughts/needs – [sami.ruponen@vtt.fi](mailto:sami.ruponen@vtt.fi)

**DLLaaS visible in CCW 23-25 May at VTT stand!! Free registration!**

**<https://www.critical-communications-world.com/>**

# bey<sup>0</sup>nd

## the obvious

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