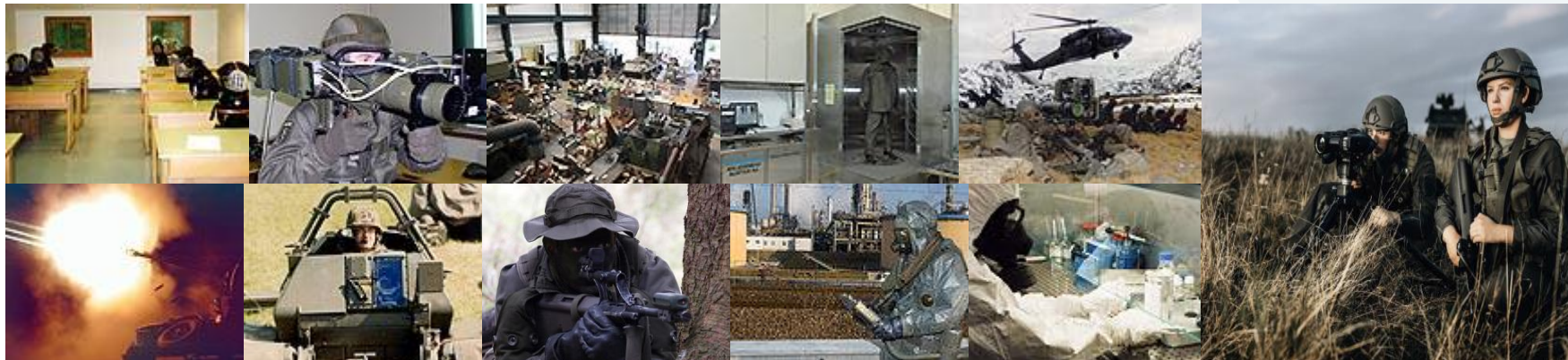




The Safety Pin – Coordinated Security and Defense Research for Austria

EDF-Days, Austrian Federal Economic Chamber, 19/20 September 2023, Vienna



Two Programs*



* A third funding program covering digital security research, „Kybernet-Pass“ (K-PASS) is currently in the final stages of development, planned to be launched in Q4-2023 by a first call with a budget of € 5 M

One mission – The Safety Pin

- ✓ The **strategic goal** of the safety pin aims at **funding** (primarily) **Austrian companies and research institutions in the research and development** of new technologies and the creation of the necessary knowledge to **increase the security** of Austria and to **generate added value** in Austria
- ✓ **Financed by public funds, Safety Pin projects aim at creating scientific results with a high TRL for security practitioners** (end-users like first responders, law enforcement and the military as well as Critical Infrastructure providers like public transport, airports and electricity or water suppliers, leading in a next step to products and services waiting to be offered to security practitioners for procurement (Ø-duration from project submittal to market entrance of results is 5 -7 years)
- ✓ The civil security research program **KIRAS** and the defense research program **FORTE** jointly form the "**Austrian safety pin**", which concentrates all federal security research funding to maximize efficiency and minimize processing costs. A brand new programme on Cyber security, **Kybernet-Pass** will join the safety pin in 2023.
- ✓ The safety pin has one joint **budget of €19m** (f. the 2023 calls), which is split between the programmes every year.

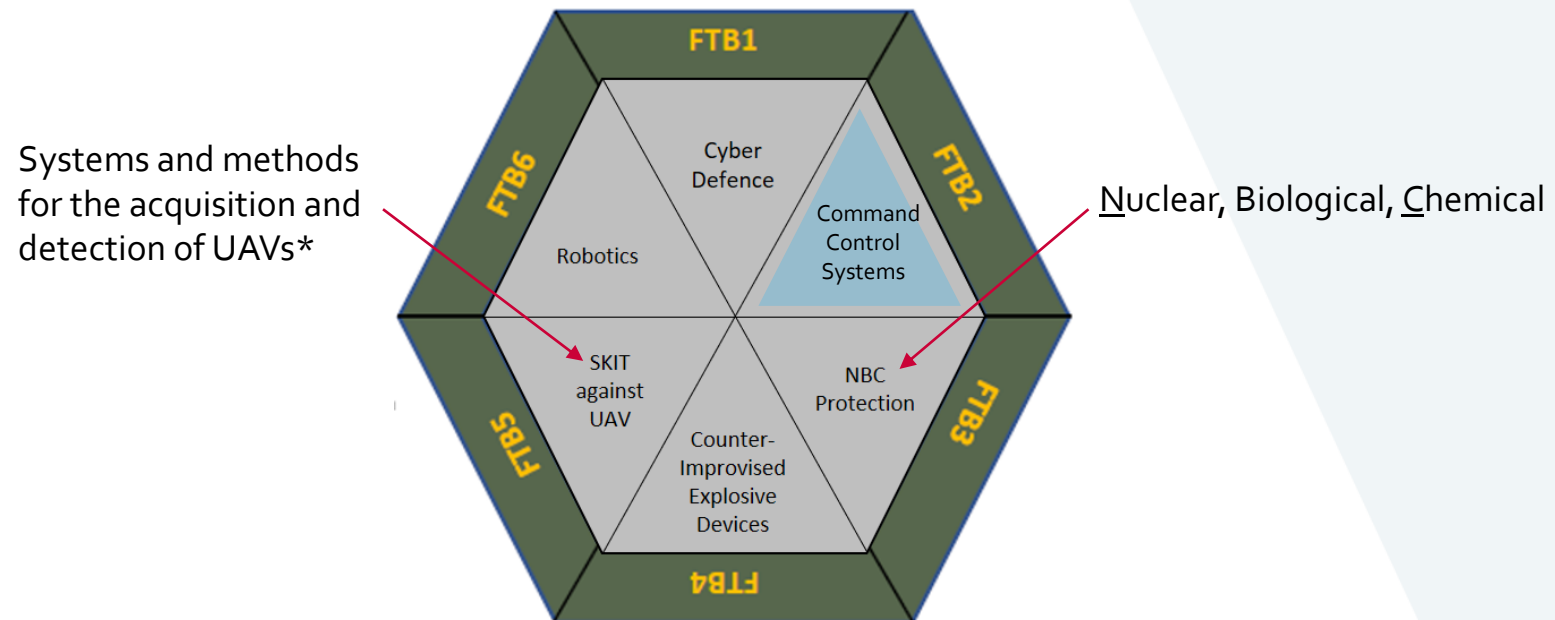
KIRAS & FORTE - similarities

- ✓ The Federal Ministry of Finance (BMF) is in charge of the program ownership (financing, organization and political responsibility), the program management rests with the Austrian Research Promotion Agency (FFG)
- ✓ Strategic coordination takes place within the framework of a strategic steering committee (in different configurations for the programs)
- ✓ For tendering, **various FFG-financing instruments** are to be used for **financing rates of up to 85%** (exception: Instrument F&E-DL: 100% financing)
- ✓ Average project duration lasts (depending on the chosen financing instrument) **from 1 to 2 years**, average funding amounts **from € 150k to € 600k** for research results **from TRL 4 to 6**
- ✓ FORTE and KIRAS call will be opened in parallel (6th joint Call: 10/2023 – 03/2024), to minimize duplicate submissions and administrative burden

KIRAS & FORTE – characteristics

- ✓ **Research Focus KIRAS**: Civil security issues incl. Dual-use, identified by end-user/practitioner (Ministries, Provinces, Critical Infrastructure operators).
- ✓ A **successful KIRAS-consortium** for a project must consist of at least one end-user/practitioner, researchers, companies and GSK experts.
- ✓ KIRAS has been in operation since 2006 (**346 projects funded with est. € 122 M**)
- ✓ The European security research program started in 2007 (currently Civil Security for Society in Horizon Europe with a total Budget of around € 1.6 Bn)
- ✓ Funding of non-Austrian participants is possible in **individual cases** at KIRAS
- ✓ **Research Focus FORTE**: **Defence related issues (not dual-use!)** identified by BMLV for future military challenges (FORTE = FORschung & Technologie).
- ✓ A **successful FORTE consortium** for a project must at least consist of a researcher, a company and the BMLV / ÖBH user.
- ✓ FORTE is operational since 2018 (**50 projects funded with est. € 20 M**)
- ✓ The European Defence Fund started in 2021 (Budget of est.. € 2,65 Bn)
- ✓ Funding of non-Austrian participants is **generally possible** at FORTE

Austrian Defence Research - 6 Priority Capability Topics



*UAV- unmanned aerial vehicle

Security Research in Austria

Online Security Research Map KIRAS

The Online Security Research Map KIRAS has been established in December 2009 by the bmvit for the purpose of allowing:

- End-users (= Mol, MoD, provincial authorities, first responders, critical infrastructure operators);
- Researchers;
- Businesses;
- Humanities and Social Sciences researchers (GSK);

to project their respective demands and capabilities on this website for facilitating the creation of consortia for KIRAS-projects. Thanks to the intuitive setup of the map, over 500 Institutions have enlisted to this free of charge show case.



Link: <http://landkarte.kiras.at/> or via KIRAS-Main Page www.kiras.at

Successful Projects, example 1

“TOM”

Tele-operated aMun-Handling

Background:

Logistics are key for any military operation. Ammunition supply chains are manpower intensive and vulnerable to maintain. Automatisations can help in reducing these risks.

Goal:

Increase the safety of the ÖBH personnel in operational areas, to **support and relieve the personnel on site**, and to increase the efficiency of tactical logistics in the operational area. Here, the focus lies on the 1st line and the follow-up supply at the battlefield during domestic and foreign missions of high intensity. To this end, a concept is being developed for **a tele-operated, geographically flexible, energy self-sufficient ammunition transport system**. The transport system makes it possible to unload ammunition pallets from 20' containers without the use of human beings.



- Operable demonstrator of an automatic and tele-operated supply system for last-mile ammunition transport
- Successfully tested in a scenario study
- Elaborated performance specifications, SWOT-analysis and cost projections.

Successful Projects, example 2

“VitalMonitor”

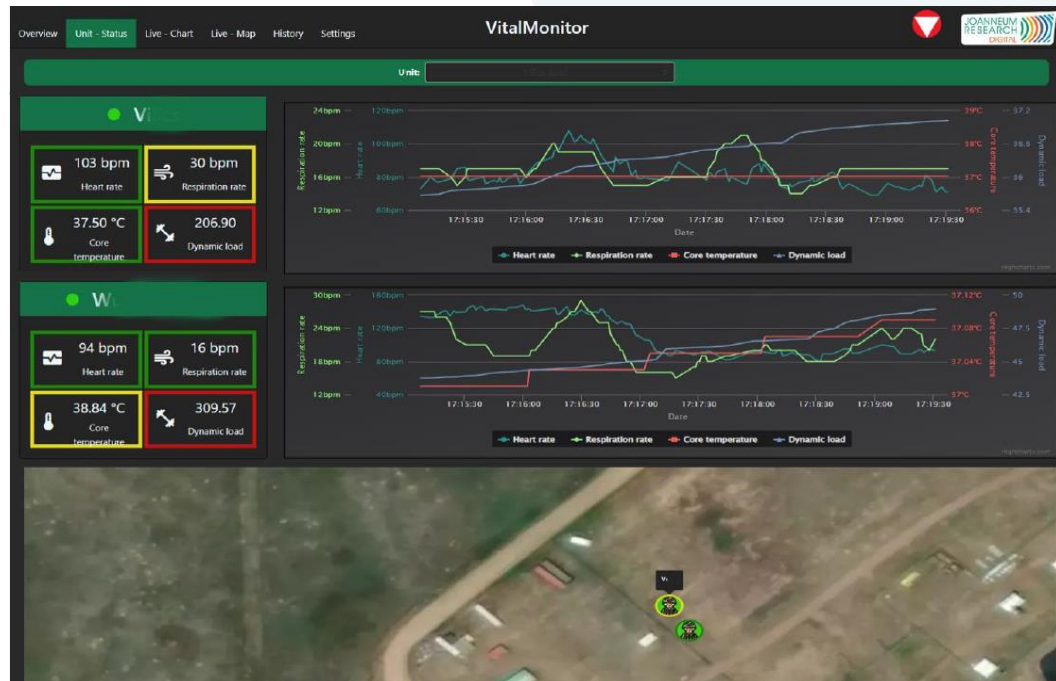
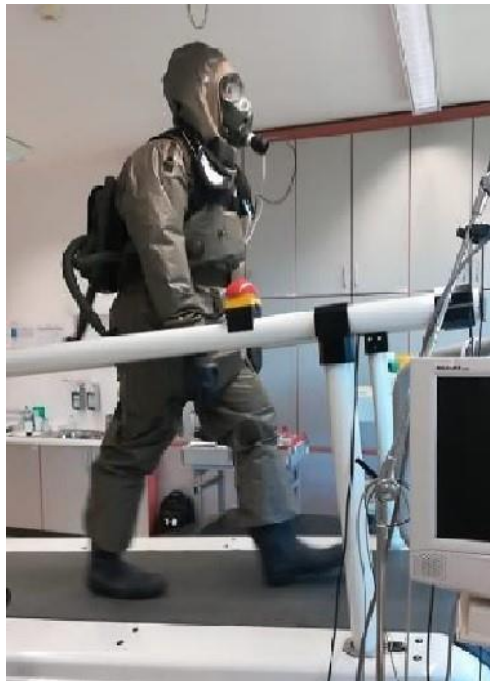
Multi-sensor wearable vital monitoring system
for military training and military mission
scenarios

Background:

Depending on the military mission, the requirements and psycho-physiological stress patterns for the affected persons can differ. Due to the high degree of technical sophistication in military work tasks, the **investigation of psycho-physiological performance** can be considered as a key issue for a successful completion of the contract.

Goal:

As a major outcome of this project, on the basis of innovative mobile sensor solutions and time-optimized sensor models, a **real-time management system** is created to individually **control critical application scenarios**, and consequently enabling interventions in a timely manner.



- Real-time monitoring of psychophysical stress and strain
- Simple assessment of physical stress ("stress index")
- Improved statement about the individual stress situation in real life situations

Successful Projects, example 3

“DEKO-AirTRans”

Flexible C-130 transport solution for airborne relocation of ABC-contaminated people

Background:

International crises with increasing frequency in ABC contamination and also life-threatening and highly contagious infectious diseases (Ebola, Coronavirus, etc.), require ÖBH's “ca-pabilities” to **transport contaminated persons / personnel** (military, embassy, Austrian citizens, international assistance), etc.). The use of aircrafts and the **operation of military airfields** must be provided by the ÖBH even **under CBRN threats** and the safety of crew, passengers and aircraft as well as ground personnel must be guaranteed by means of suitable equipment

Goal:

The development of a mobile solution based on **smart medical devices** will enable monitoring of the individual psycho-physical stress situation, automatically analyse critical developments and make **individual documentation of the transport process** available at the destination in order to be able to initiate DEKO measures.



- Development of a mobile, flexible cell structure based on a modular seating range
- Inner tent construction with integrated Sensor technology incorporating BMLV expertise
- Biosensors for personal monitoring

Safety Pin – contact

➤ Program ownership:

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More Information on the FORTE program and projects: www.forte-bmf.at/en/

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