

Defence Research & Development

Austrian Armed Forces as Military End User

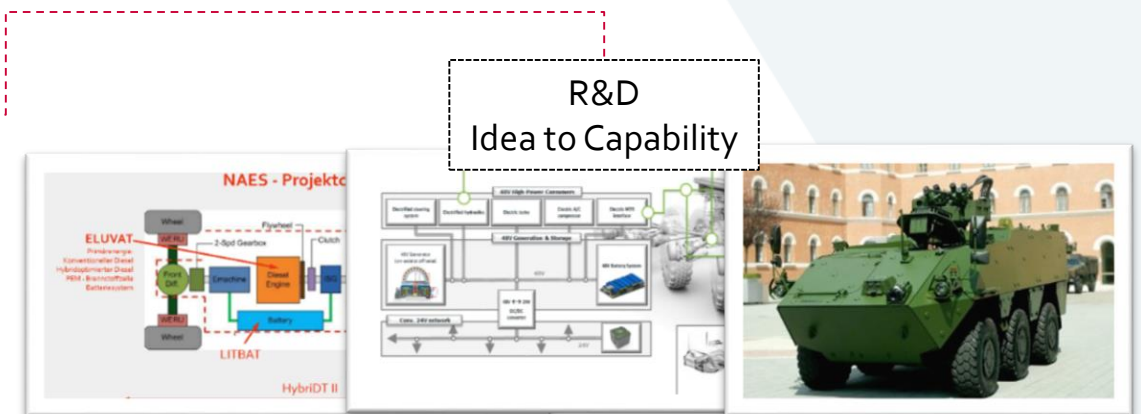
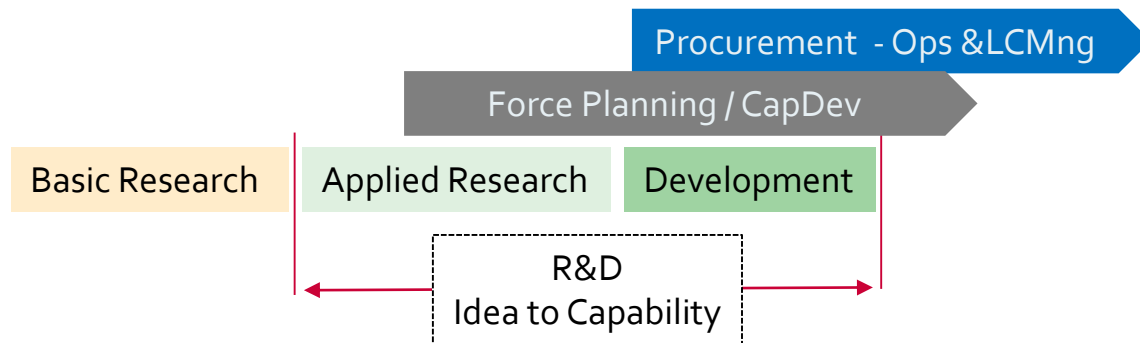
Directorate Defence Policy and International Relations
Science, Research and Development Division

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Vienna, 19.09.2023

Defence Research

Defence research is the interdisciplinary, scientific, technical or applied research for the purpose of Defence and Capability Development



Responsibilities / Portfolio

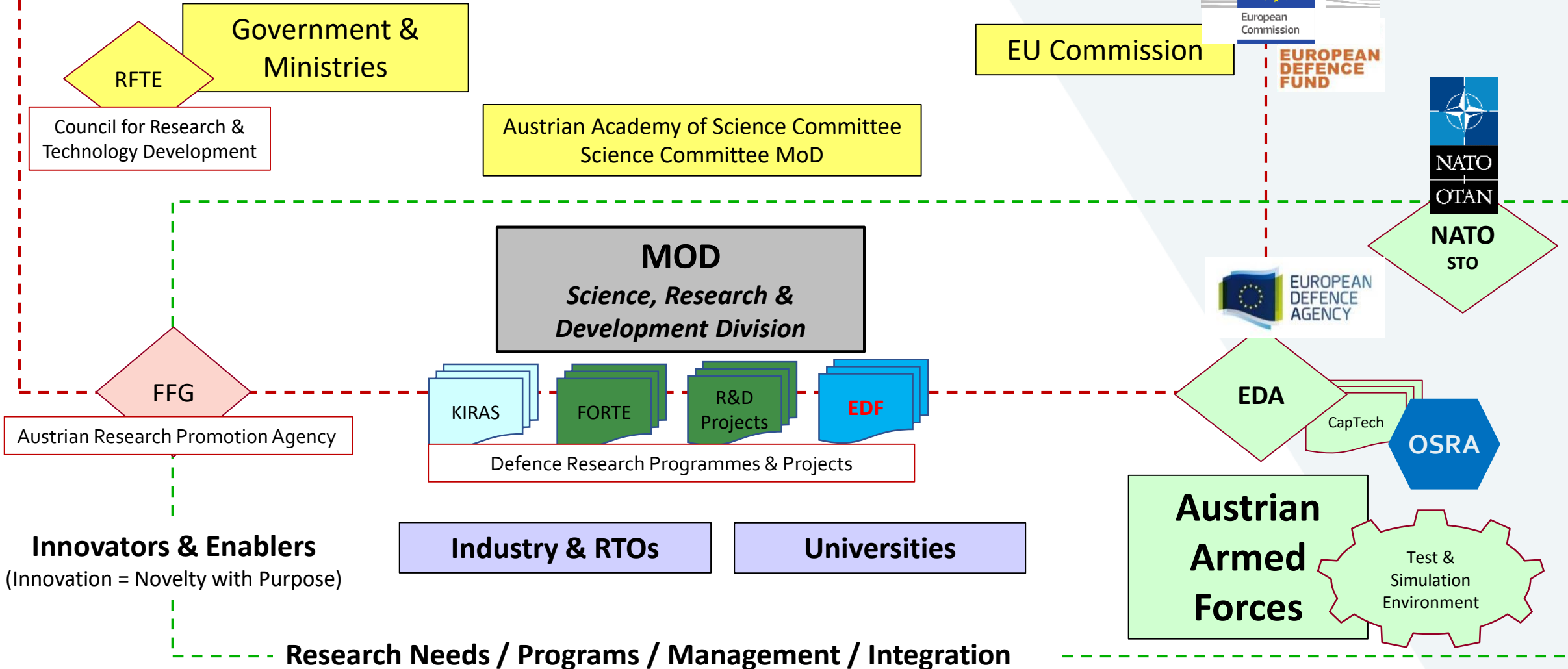


- Network
- Performance
- Outcome

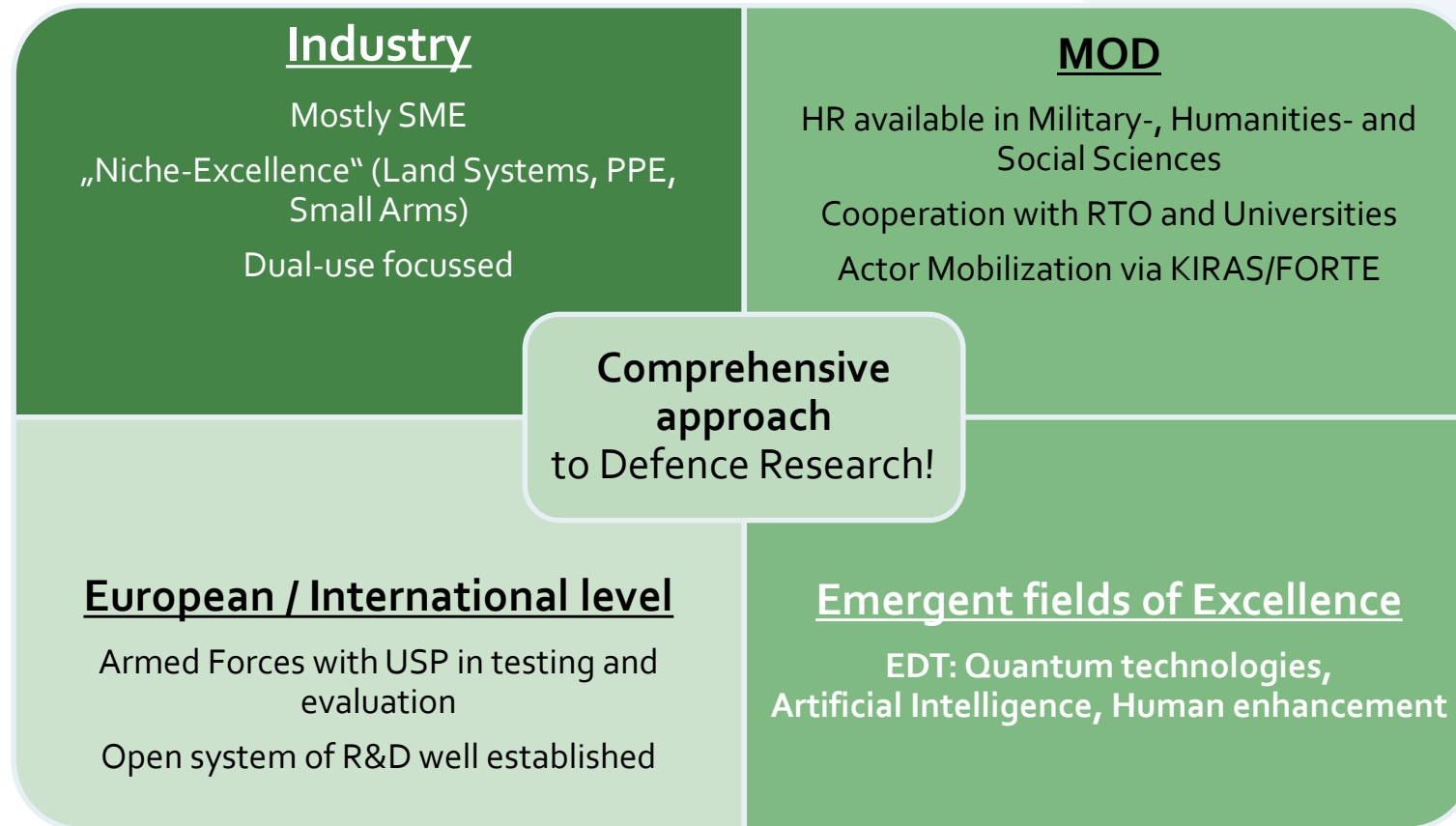


Defence Research and Innovation Eco-System

Policy / Strategy / Advisory Board



Current Situation National Defence Innovation System



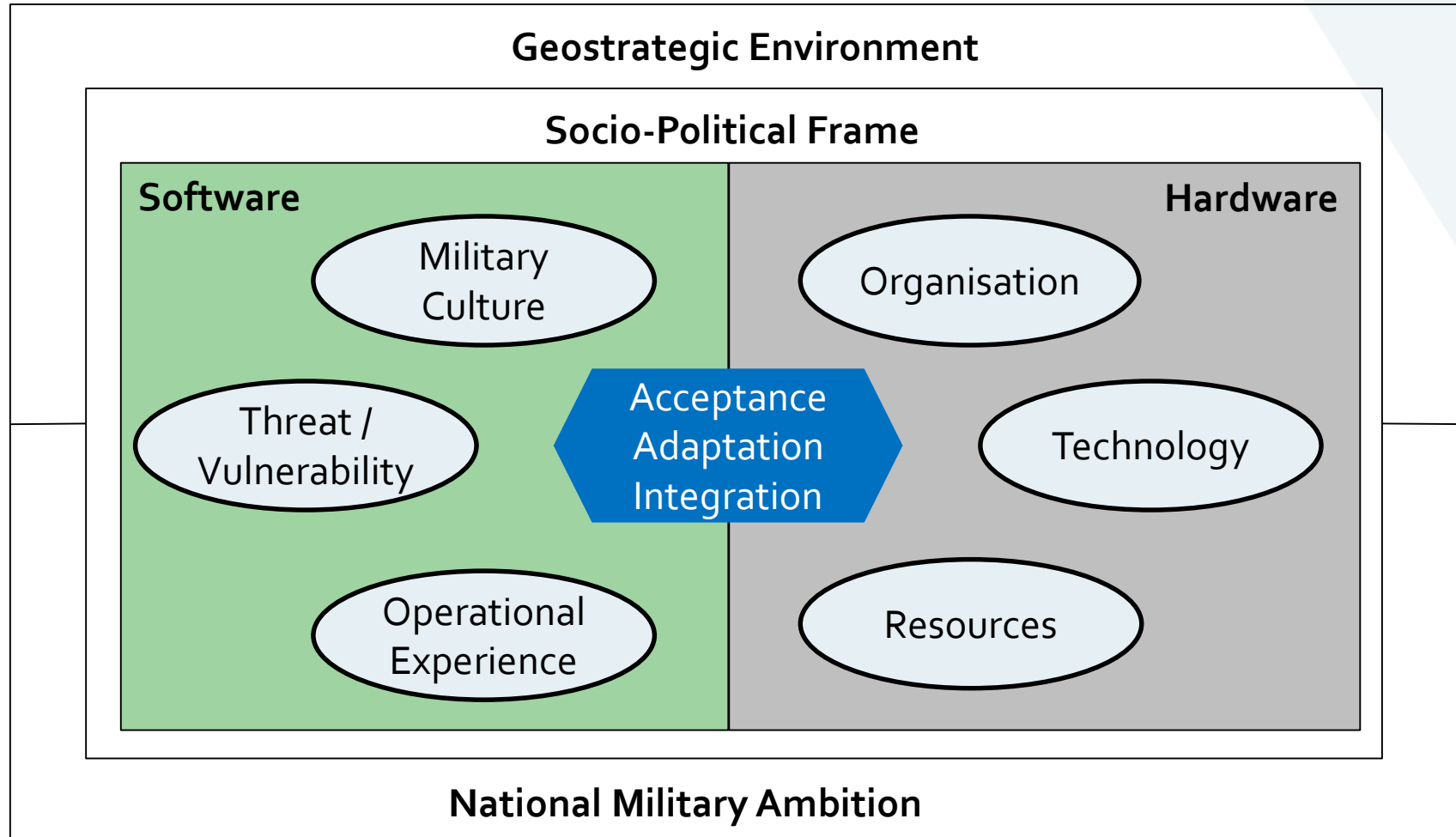
PPE	Personal Protective Equipment
RTO	Research Technology Organisation
USP	Unique Selling Proposition
EDT	Emergent Disruptive Technology

Defence Innovation:

Deliberate technological, organisational and doctrinal change in response to a new strategic environment to achieve advantage.

Military Innovation

The choice of Defence Innovation or Defence Irrelevance



Readiness Levels:

Technology RL

Societal RL

Organisational RL

Legal RL

Strategic Research Areas

Critical Technology / Capability Areas

- Digital Transformation
- Cyber Defence
- Electronic Warfare
- Space Technology
- Navigation Warfare
- Autonomous Systems
- CBRN and Medical Countermeasures
- C-IED
- C-EAT
- Sustainability, Renewable Energy & Storage

Emergent Disruptive Technologies/ New Technologies

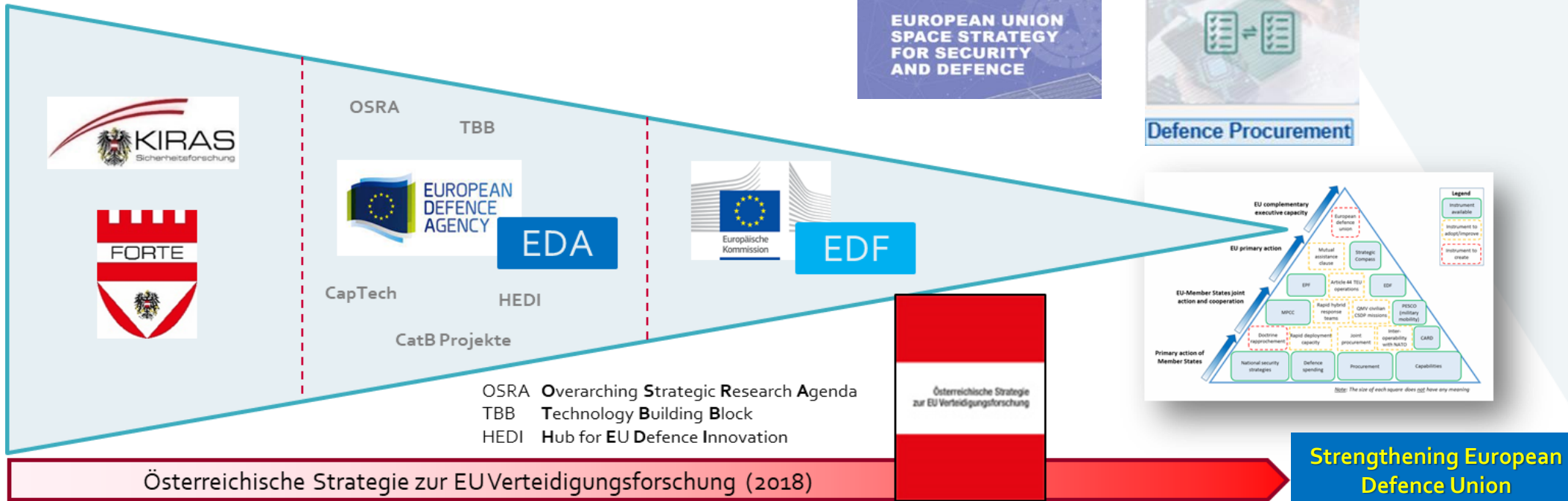
Military Sciences

- Security / Defence Policy & Strategy
- Military Leadership
- Operations Research, Modelling & Simulation
- Society, Armed Forces and Ethics
- Training & Education
- Military History
- Military Medicine and Human Factor

Defence Research – Integration into EU

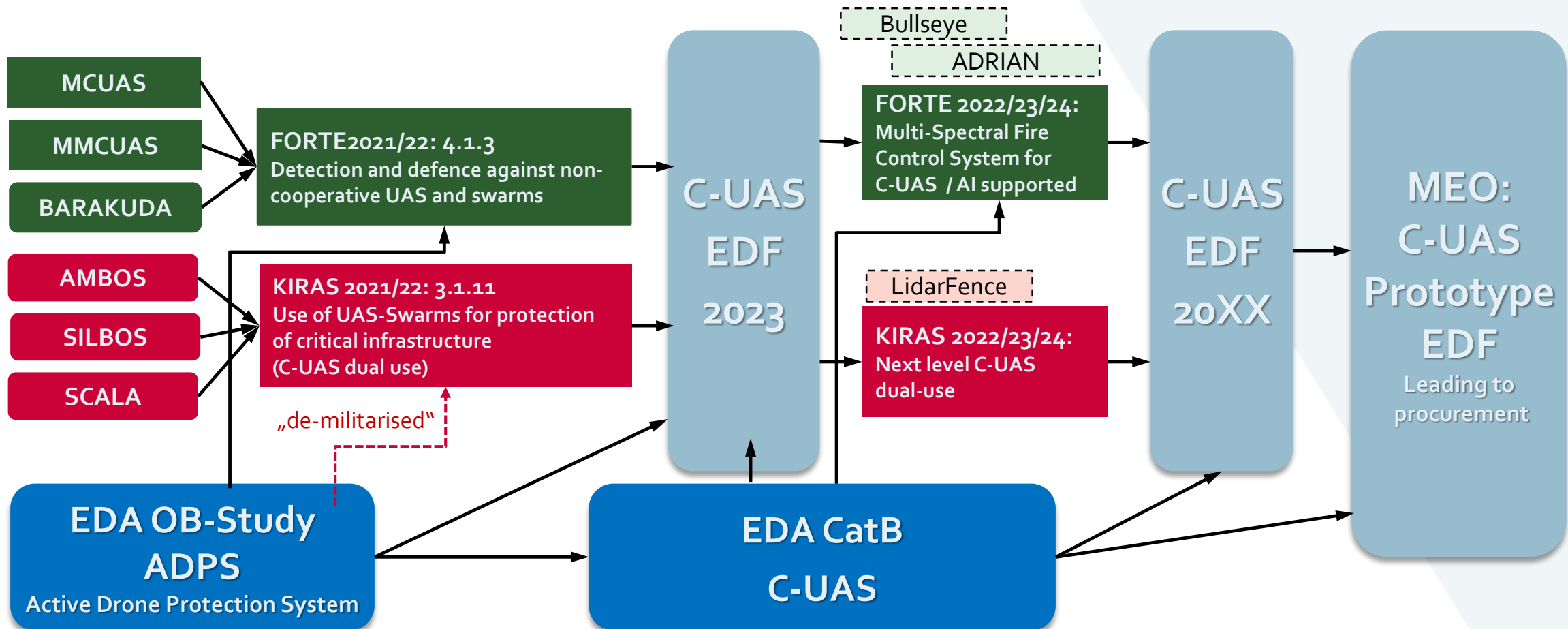


Network of European Defence Fund National Focal Points (NFP)

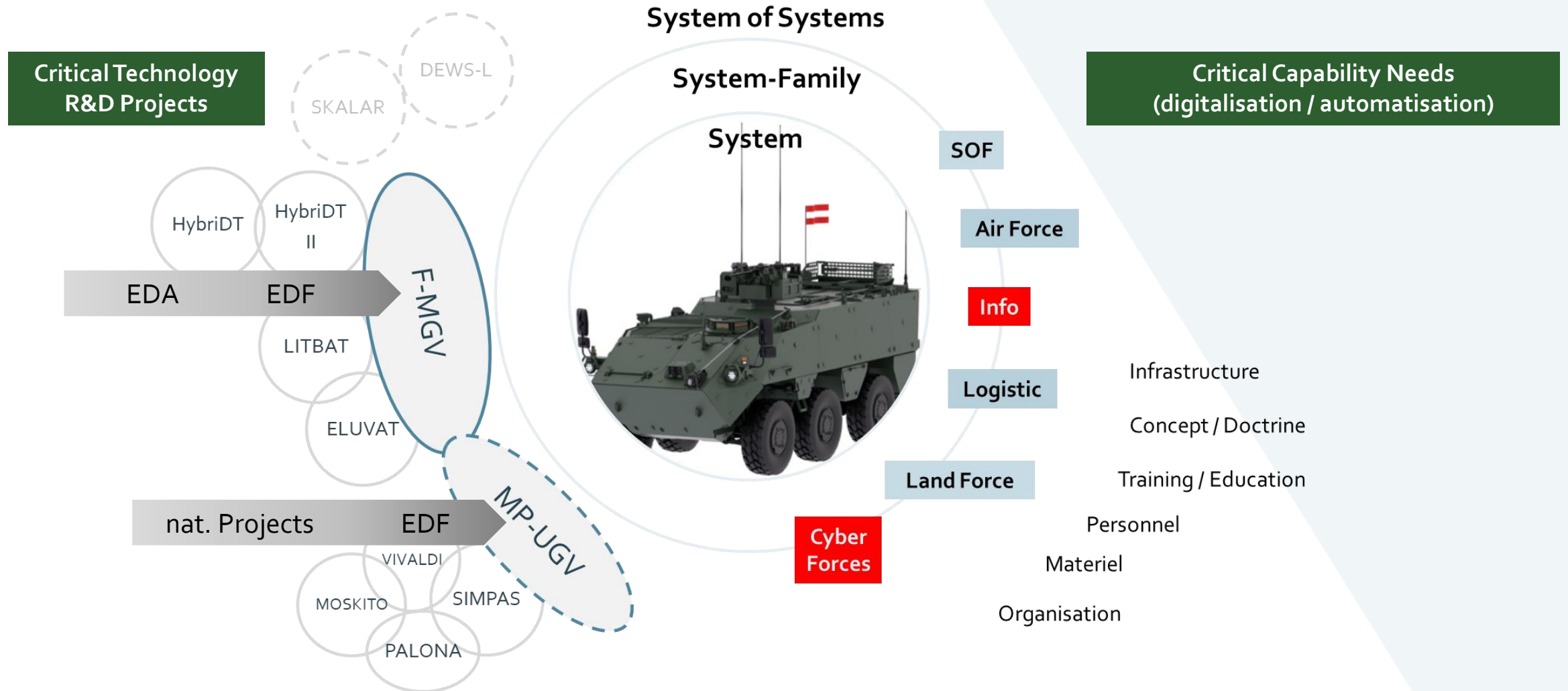


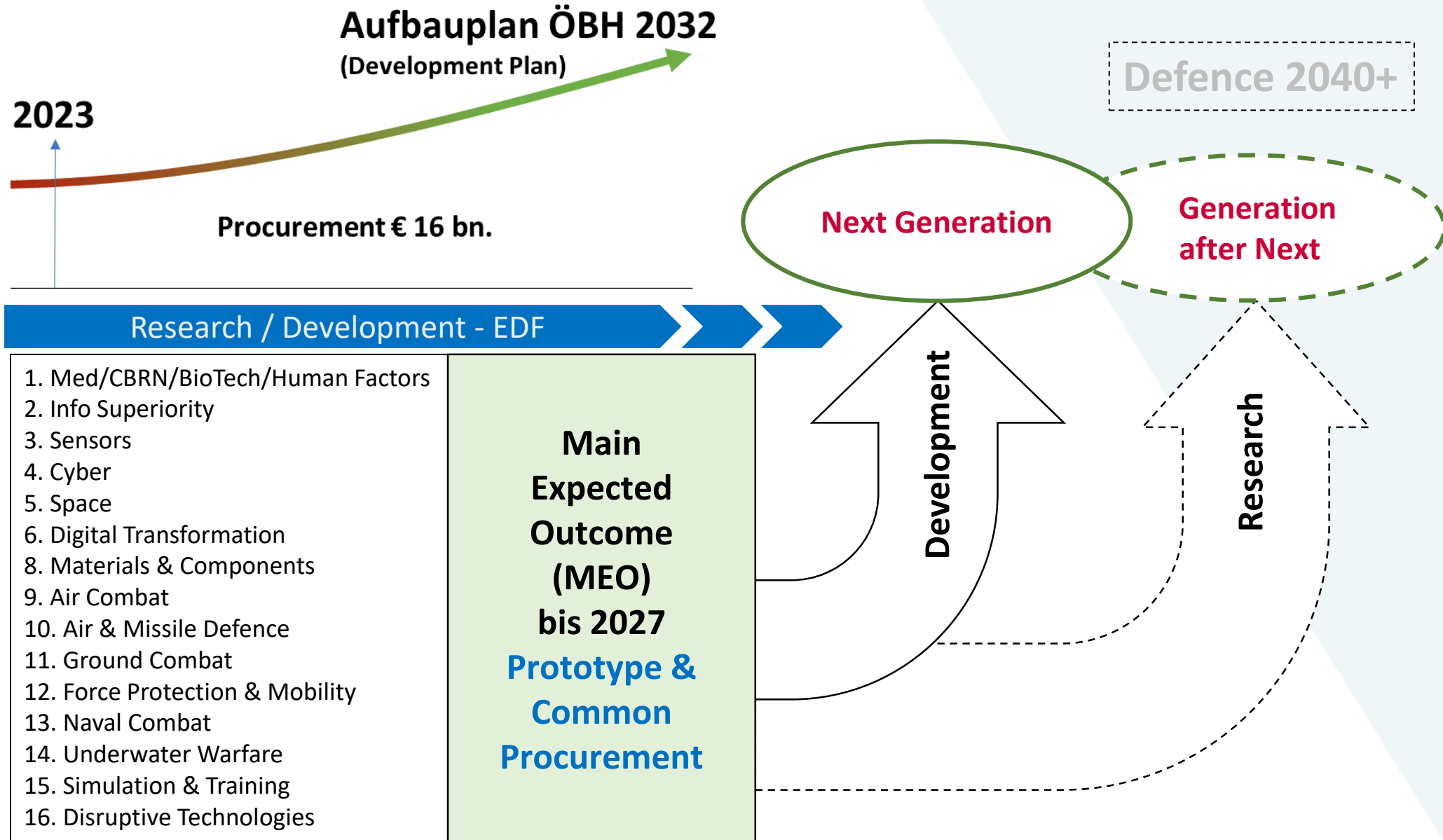
Complementary use of Research Programmes

R&D Roadmap Example C-UAS



Technology to Capability (an Example)





Mobilität der Einsatzkräfte

5.610

EDF Main Expected Outcomes:

- EU MS CBRN system of systems and technologies integration
- Defence Medical Countermeasures
- Development of vehicles and integration of technologies for vehicles upgrades
- Contribution to future MBT and other armoured vehicles development
- Development of UGS

Schutz und Wirkung

7.865

EDF Main Expected Outcomes:

- Development and integration of PRS receivers into EU MSs military systems (autonomy/synergy space/defence)
- Joint procurement of SSA capabilities interfaced with EU SST
- Space-Based early warning prototype
- Space-Based ISR constellation prototype

Autarkie und Nachhaltigkeit

2.860

EDF Main Expected Outcomes:

- Prototype of an European C2 software suite (contributing to an EU OHQ)
- Development of European common and/or interoperable tools for: cyber operations, incident management, information warfare defensive operations and preventative measures
- Resilience for cyber-physical systems
- Military operational cloud systems
- Foster innovation and cooperation for stakeholders in the defence M&S domain

Impact Pathways

Impact Pathways	Short term Indicators 1-5	Mid term Indicators 5-7	Long-term Indicators 10-15
<i>Capability</i>	Successful R&D Projects	Demonstrator Prototypes	R&D related procurement
<i>Know How Transfer</i>	R&D projects with troops as End Users	Field testing, Focus on DOTMLPF-aspects of R&D	Change in doctrine and training
<i>Technology and Industry</i>	National and European cooperative R&D with industry	“foot in the door” of new system supply chains	Increased procurement with AT industry share

D Doctrine
O Organization
T Training

M Materiel
L Leadership
P Personnel

DOTMLPF
F Facilities

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