EUROPEAN DEFENCE AGENCY

STASS II industrial workshop

Scope

- Tour the table
- Administrative remarks
- Agenda
- Objectives
- Soldier Systems at EDA
- Future developments

Administrative remarks

- Meeting schedule
  - Meeting starts 10:00 and ends at 15:30 hrs
- Breaks
  - Lunch break: 12:00 – 13:00
  - Coffee break: 14:15 – 14:30
- Smoking
  - Please use the designated smoking areas outside the building
- Security
  - Please have your badge with you,
  - Security check once you reenter the building
- Wi-Fi for visitors is available
  - Access Point name: NPAP
  - Access Point key: xxx

Agenda

	TIME	TOPIC	REMARKS
1	1000 – 1015	Introduction	EDA
2	1015 – 1045	Brief Study Presentation	GMV
3	1045 – 1125	Definition of Common European Capabilities, Scenarios, and Requirements. [Capability Views, Operational Views and Service Oriented Views]	Rheinmetall Defence Electronics
4	1125 – 1200	Analysis of Current Systems and Identification of Standardization / Technology Potentials – [Background View]	Larimart
	1200 – 1300	Lunch break	
5	1300 – 1335	Relevant Standards and Technologies – [Technical View]	TNO
6	1335 – 1415	Soldier System Description, Interface, Standards and protocols definitions – [System View]	GMV
	1415 – 1430	Coffee break	
7	1430 - 1450	Cost Benefit estimation and Road map – [Business View]	Rheinmetall Defence Electronics
8	1450 – 1515	Concluding remarks / Open Discussion	Contractor/All
9	1515 – 1530	End of workshop	
10	1530 – 1630	STASS II Design v2 progress meeting	EDA/PMG/Study team only

Objective

Gather inputs and collect feedback from industrial experts regarding all relevant aspects of the Standard Soldier System Architecture under development, which will be subject to standardization.

CapTechs – Technology domains & networks

CAPABILITY, ARMAMENT & TECHNOLOGY

Information Superiority	**Communication Information Systems & Networks**	
	System of systems, Battlelab and Modelling & Simulation	
Intervention & Protection	**Aerial Systems**	**Naval Systems**
	Ground Systems	**Ammunition Technology**

EUROPEAN SYNERGIES AND INNOVATION

Innovative Research	**Materials & Structures**
	Technologies for Components and Modules
	Radio Frequency Sensors Technologies
	Electro-Optical Sensors Technologies
	CBRN Protection and Human Factors
	Guidance & Control
	Energy WG

The detailed technical coverage of each group is posted on the EDA WEBSITE

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CapTech Ground System (GS)

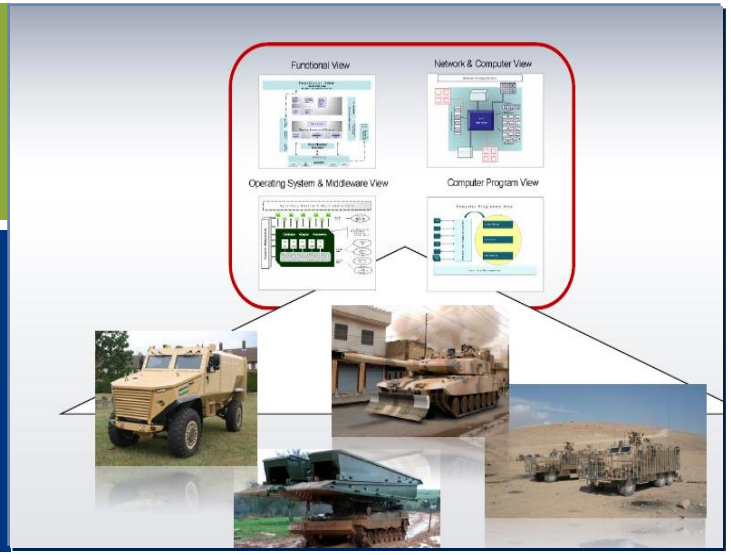
The CapTech Ground Systems address topics through a system perspective that include, but not limited to, fully integrated, reconfigurable and upgradable platforms and mission systems, enhanced platform and occupants survivability and protection, enhanced autonomy and ground traffic insertion of unmanned ground vehicles, enhanced agility and performance of soldier systems as well as effective protection against all IEDs.

CAPABILITY NEEDS:

- Enhancement in conducting Joint Operations, Maneuver, Employing Joint Firepower, Ensuring Force Protection & Security and ensure mobility and counter-mobility.

TECHNOLOGIES/RESEARCH DOMAINES

- Land Vehicle
- Unmanned Ground Vehicle
- Soldiers Systems
- C-IED
- Camps
- Mobility



PROJECTS/PROGRAMMES (e.g.) :

- Combat Equipment for Dismounted Soldier Systems Feasibility Study Programme [CEDS FSP]
- Hybrid Manned-Unmanned Plantooning [HyMUP]
- Study to investigate opportunities and challenges of lightweight constructions for Armoured Multi-Purpose Vehicles [L-AMPV]
- IED Detection Programme
- European Reference Open Architecture Standard for a modern Integrated Electronic Mission System in Military Land Vehicles [LAVOSAR II]

CapTech Ground Systems response to CDP land priorities

Land Vehicles

- Fully integrated, reconfigurable and upgradable platforms and mission systems
- Mission tailored effectors to neutralize threats
- Enhanced agility, sustained functionality and silent operations
- High energy efficiency and capability
- Real-time 360° continuous awareness
- Enhanced platform and occupants survivability and protection
- Assured capability readiness and sustainment

Unmanned Ground Vehicles

- Enhanced autonomy
- Ground traffic insertion
- Intelligent convoying and integrated C4ISTAR
- Better capabilities in multisystem context

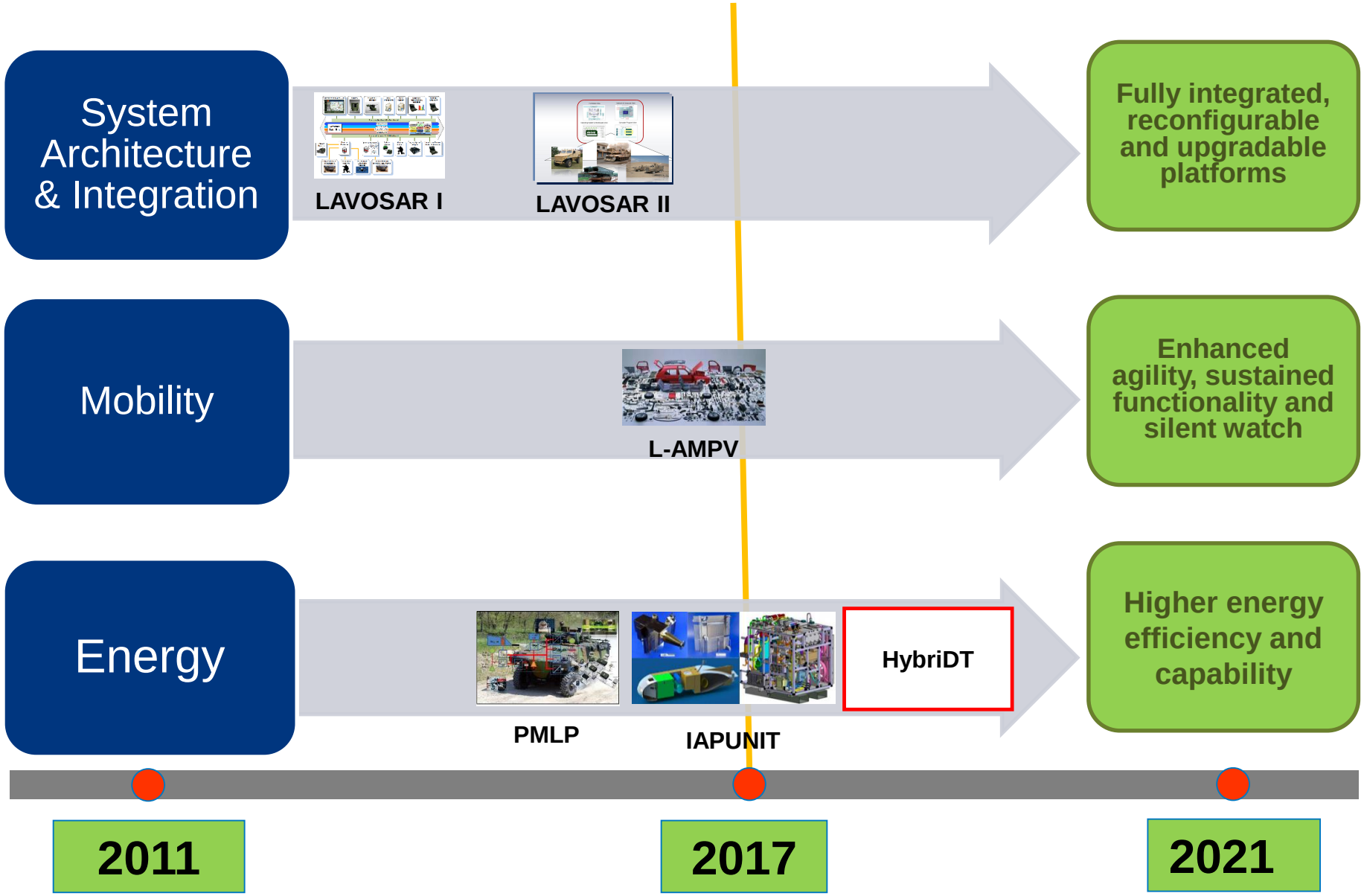
Soldier Systems

- Reduced weight of soldier's kit by 60%
- Enhanced agility and performance

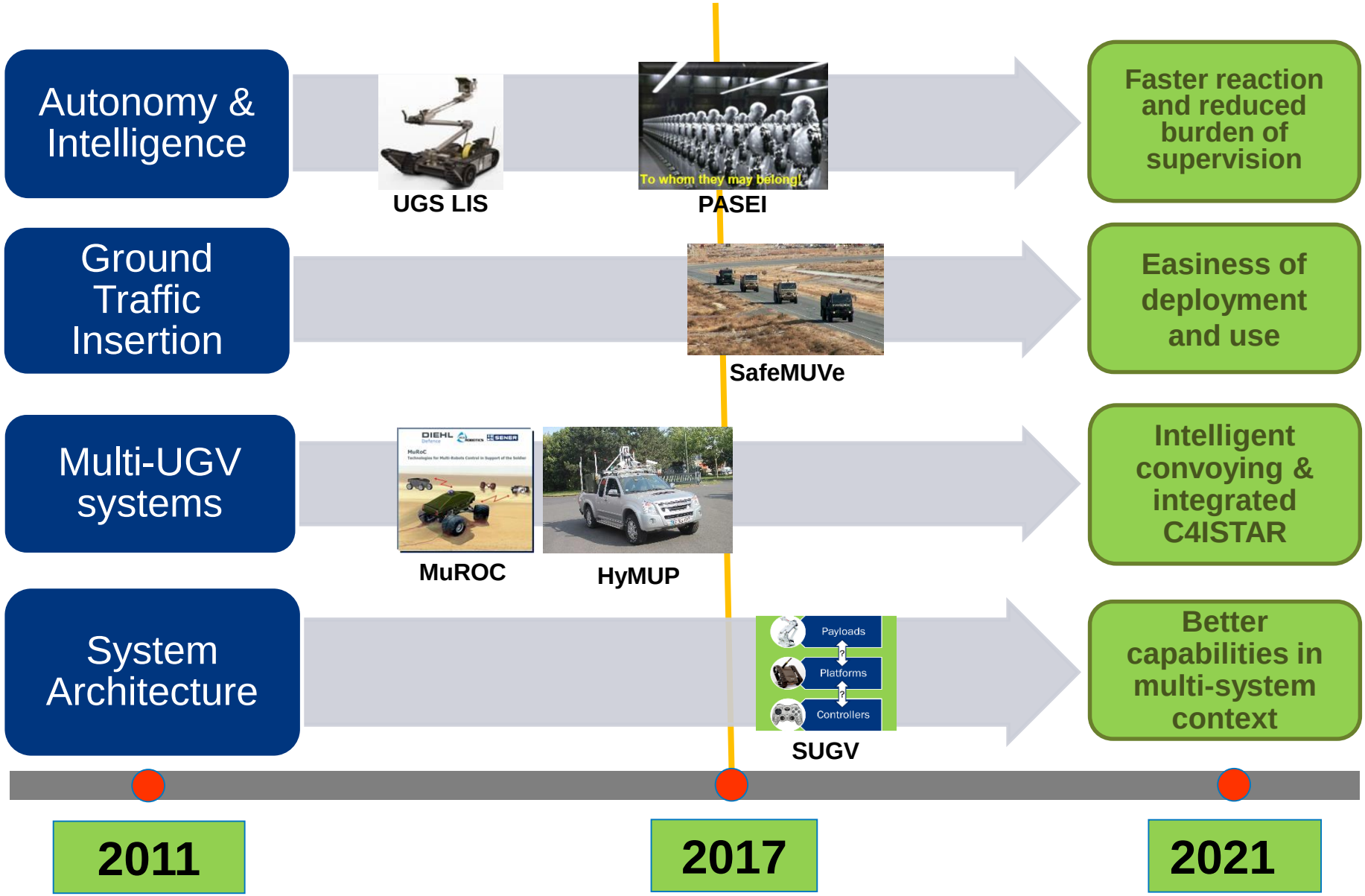
C-IED Mobility, Camps

- Effective protection against all IEDs and land mines including IED detection and identification while on move
- Enhanced "round-the-clock" security of static and deployable camps

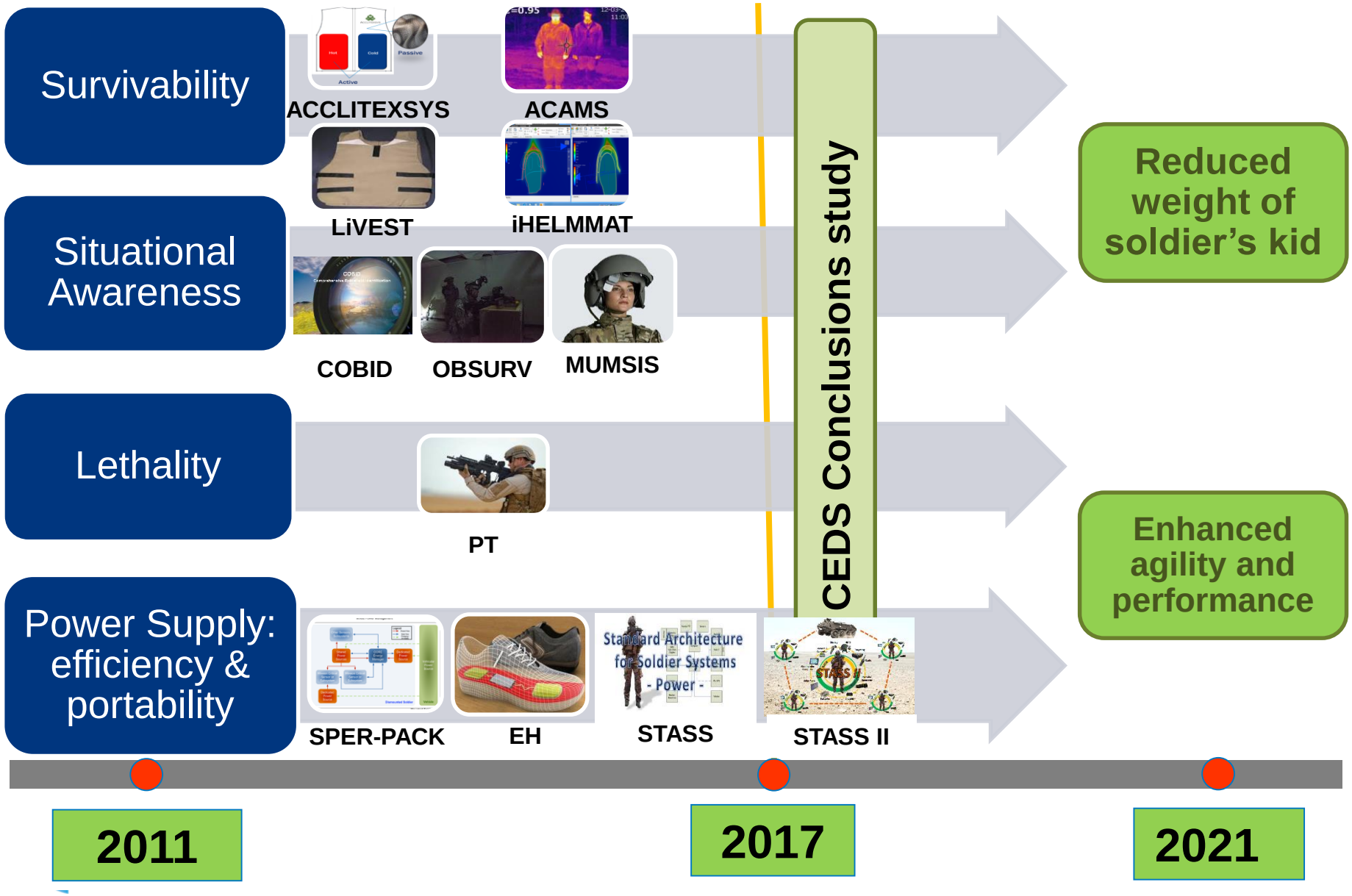
Ground vehicle



Unmanned Ground Vehicle

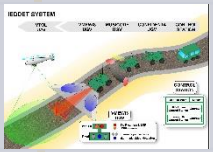


Soldier Systems



Other battle field topics

C-IED



IEDDET

Effective protection at speed against all IEDs

NLW

HPM

NLAOS

Tailored effectors to neutralize threats as appropriate

2011

2017

2021

Soldier Systems

Survivability	Lightweight and flexible ballistic protection	**2**	**3**
	Protection against thermo baric pressure / effect	**2**	**3**
	Adaptive camouflage	**1/2**	**2/3**
	Sniper detection systems	**1**	**0**
	Physiological monitoring	**1**	**1**
Situational Awareness	Blue Force Tracking, Positioning and Orientation (also indoors)	**2**	**2**
	Augmented reality for situation awareness	**1**	**1**
	Observation under reduced visibility	**1/2**	**1**
Lethality	Less-than-lethal weapons	**1**	**1**
	Portable blast-enhanced weapons (incl. thermobaric)	**1**	**1**
	Improved Precision Targeting	**2**	**1**
Power Supply: Efficiency & Port.	Low-weight high capacity batteries	**2/3**	**3**
	Miniaturized Fuel Cells	**2**	**3**
	Power efficiency	**2**	**2**
	Energy Harvesting	**2**	**3**
Soldier Mobility	Exoskeletons and Robotics equipment	**1**	**2**

EUROPEAN DEFENCE AGENCY

PREPARATORY ACTION ON DEFENCE RESEARCH

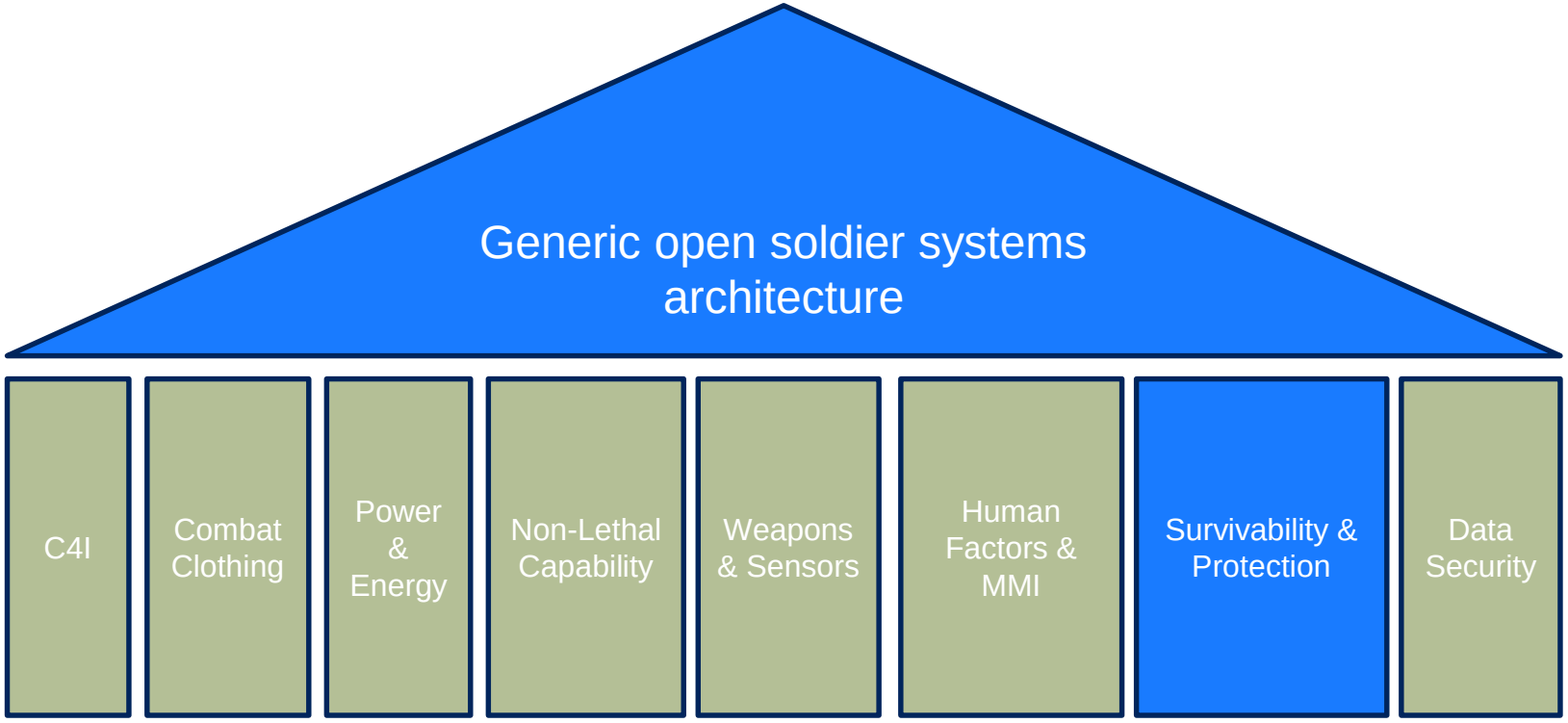
Force Protection and Soldier Systems

Research in Technology and products in the context of Force protection and Soldier Systems

Soldier system building blocks

Force protection and advanced soldier systems beyond current programmes

Domains addressed under the call Force Protection and Soldier Systems



Sub-topic (a)

Force protection and advanced soldier systems beyond current programmes

Scope: Generic open system architecture

- Ready for standardization
- Comprehensive coverage: group, squad, multi-national, vehicle, etc.
- Architectural domains: Electronics; Voice and data communication; Software; Human interfaces devices; Effectors
- Technical validation
- Build on resent results from EDA and NATO

Sub-topic (b)

Force protection and advanced soldier systems beyond current programmes

Scope: Tailor-made blast, ballistic and CBRN protection of military personnel

- Light weight ballistic and blasting protection with 20% reduction
- Effective dissipation of energy and body protected zones
- Explore integrate CBRN detection and/or protection
- Flexibility and modularity
- Advancement in manufacturing

Sub-topic (c)

Force protection and advanced soldier systems beyond current programmes

Scope: Adaptive camouflage

- Active and passive camouflage methods rapidly reconfigure or change to surrounding
- Active against variety of present and future threats from advanced sensors systems and observation means

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