

## Overarching Strategic Research Agenda (OSRA)



The Overarching Strategic Research Agenda (OSRA) was launched by the European Defence Agency (EDA) with the aim of providing a harmonised view of relevant European defence research priorities and the possible paths to achieve them, taking into account different funding mechanisms available such as the upcoming European Defence Fund (EDF).

For that purpose, OSRA aligns the Strategic Research Agendas (SRAs) of EDA's various Capability Technology Groups ('CapTechs') with military tasks and long-term capability needs agreed by Member States in the Capability Development Plan (CDP). CapTechs are run by EDA and bring together experts from government, industry, small and medium enterprises (SME) and academia. Currently, EDA hosts 12 such CapTechs and two Working Groups (see graphic below).

Building on CapTech's SRAs and Member States' capability development needs, OSRA defines common research

and technology (R&T) priorities in the form of so-called Technology Building Blocks (TBBs).

## Technology Building Blocks (TBBs)

In December 2018, EDA Member States' R&T Directors approved the outcome of the OSRA review, including a total of 139 specific TBBs, each of them focused on a specific R&T domain in which a European collaborative approach would be beneficial to support the development of defence capabilities identified by Member States in the CDP.

Every TBB provides information on the existing technology gap in a given domain, its relevance for defence capability development, the Technology Readiness Level (TRL), links with other TBBs as well as on related projects within and outside the EDA framework.

INFORMATION SUPERIORITY			INTERVENTION & PROTECTION				INNOVATIVE RESEARCH
Communication Information Systems & Networks	Systems of systems Battlelab and Modelling & Simulation	Cyber Research & Technology WG	Aerial Systems	Ground Systems	Naval Systems	Ammunition Technology	Materials & Structures
							Technologies for Components and Modules
							Radio Frequency Sensors Technologies
							Electro-Optical Sensors Technologies
							CBRN Protection and Human Factors
							Guidance, Navigation & Control
							Energy and Environment WG



The 139 TBBs refer to a wide range of different technology areas, each of them covered by a specific CapTech. A few examples: Detect, Sense and Avoid Systems (CapTech Air), Ignition Systems of Energetic Materials (CapTech Ammunition), Human Clothing, Equipment & Integration in Platforms (CapTech CBRN & HF), Enabling Components for Advanced Antennas (CapTech Components), Information Process Enhancement by using Al and Big Data (CapTech Information), manned/unmanned teaming and adaptive cooperation between manned and unmanned systems with different levels of autonomy (CapTech Land), Camouflage and signature management technologies (CapTech Material), Underwater Communication Systems (CapTech Maritime), Multi-Robot control and cooperation (CapTech Navigation), Modelling and simulation (CapTech Optronics), Cognitive Radars (CapTech Radar), Defence Satellite Reconnaissance Systems (CapTech Simulation).

In a second step, currently in progress, OSRA will prepare associated technology development roadmaps for each of the TBBs, including plans for appropriate funding instruments. The roadmaps will help Ministries of Defence to decide whether to lead or contribute to cooperative ad-hoc R&T projects and will also inform funding decisions taken in the context of the future European Defence Fund (EDF).

OSRA
Prioritised TBBs CapTech SRAs
TBBs Roadmaps

## Link between R&T efforts and capability needs

The OSRA methodology complements the bottom-up approach of the SRAs (which are a result of the CapTechs identifying new research developments and emerging technologies that have an impact in future capabilities) with a top-down approach that takes into account the military capability needs defined by Member States.

By doing so, it provides the indispensable link between R&T efforts and the military tasks and long-term capability needs agreed by Member States in the CDP. OSRA has thus become the EU reference for technological priorities, as the CDP is the EU reference for capability priorities, and both are closely intertwined.

OSRA also adds another important dimension in that it promotes synergies and interaction between CapTechs or specific technology areas which are relevant for future capabilities that need to be developed collaboratively.