

The EDSP brings together industry, academia, authorities and innovation, research and vocational organisations to foster cooperation in building skills for the European defence industry.

Summary overview of the skills intelligence produced in 2018-2019 in the framework of the EDSP

Skills gaps and mismatches in the defence sector

Areas of skills gaps and shortages in the European defence technological & industrial base (EDTIB)



New technologies: most common areas with skills shortages and mismatches today and in future

Embedded sensors and connectivity	Al and machine learning	Nanotechnologies	
Advanced/smart materials	Robotics and unmanned systems	Augmented/virtual reality and human machine interfaces	
Advanced manufacturing	Advanced energy	Biotechnology & synthetic biology	
Quantum technologies (e.g. computing, sensing, distributed ledger technologies)			

Current and near-term mismatches in defence-specific and technical skills

Current and near-term skills mismatches Skills mismatches envisaged in 5 years' time Current skills mismatches Information architecture Mission systems design Whole systems Electronic warfare systems • Propulsion /combustion and fluid integration • Software design and Aropusion / Combostion and fluid dynamics engineering Make safe engineering Electromagnetic compatibility design Electromagnetic compatibility Autonomy engineering Composite fabrication engineering Unmanned system engineering • Electronics/navigational systems engineering Systems engineering Mission management Safety and governance Electronics/navigational sy design Systems test engineering Low-observability design engineering Synthetic environments engineering Maintenance engineering engineering • Compliance Project management Detail and installation design and management Design engineering Design validation engineering engineering

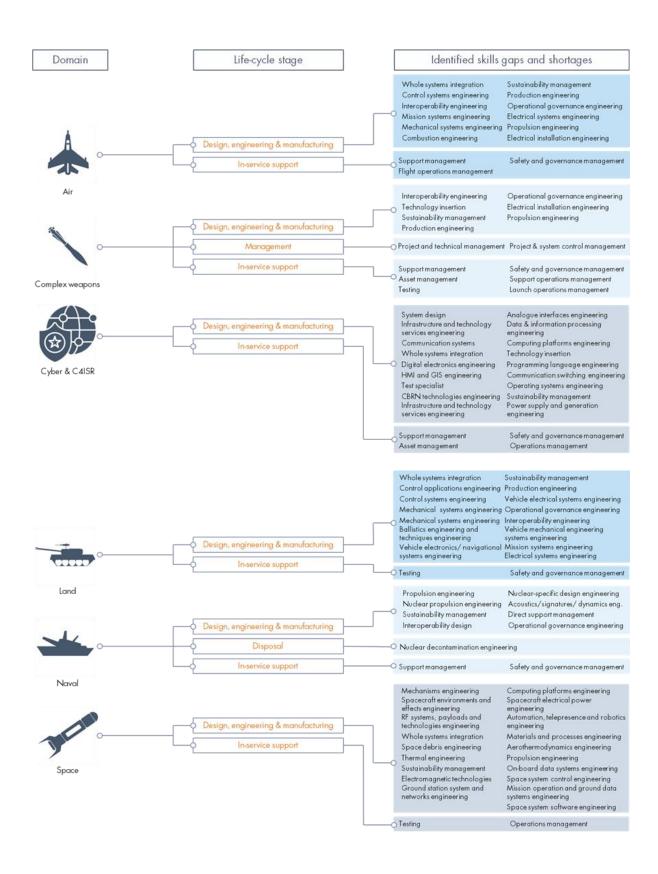
Defence-specific and technical skills: most common shortages and mismatches

unique to defence	medium-high relevance	medium relevance
electronic warfare systems engineering	information architecture	software design and engineering
mission systems design	whole systems integration	systems engineering
mission management	unmanned systems engineering	autonomy engineering
low observability design	safety and governance management	composite fabrication
	electronics/navigational systems design	systems test engineering
	design engineering	propulsion/combustion and fluid dynamics
	synthetic environments design and engineering	materials engineering
	design validation	maintenance engineering

Soft skills: most common shortages in defence

project management	ability to work in teams	leadership	
cost estimation	critical thinking	resilience	
procurement		cultural awareness	

Overview of shortages and mismatches by domain and life-cycle stage



Source: Vision on defence-related skills for Europe today and tomorrow, EDSP project report, Rand Europe 2019, commissioned by the European Commission and funded by COSME programme