National Defence Technology Centre

Report by The National Defence Technology Centre
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Defence Technological Research in Denmark

The National Defence Technologi Center presents an overview report on the current Danish defence technological research.

Key findings

Danish knowledge environments are engaged with defence clients in several contexts. Ongoing research projects for defence clients have been uncovered and are totaling to approximately DKK 160 million. **Less than a quarter of this is Danish-funded, while over 75% is funded from partly private firms and partly from the EU via the European Defence Fund**. A large portion of the accumulated knowledge is translated into production abroad without Danish participation.

Today, the EU is the single largest source of funding for Danish defence technological research. There is significant potential to enhance interaction with the EU, particularly in areas where Denmark has strong positions.

In Denmark defence technological research is primarily distributed among ten universities and GTS institutions. The Technical University of Denmark accounts for 46% of research volume, Aalborg University for 26%, and the Danish Technological Institute for 10%.

The report identifies nine platforms with established knowledge environments. All nine platforms have significant untapped potential. The largest platforms in terms of current defence technological research volume are 1) airborne technologies, including the space sector, 2) artificial intelligence and system integration, and 3) new materials.

The nine platforms

A number of strong civilian platforms with significant relevance for Danish defence and political interest receive limited, or no, defence support from the defence side today. These include research areas such as drones, cyber technology, maritime capabilities, energy and green transition, quantum technology, and maintenance.

Denmark has significant potential to contribute to new and critical technologies that will be crucial for European and Danish security in the long term but go beyond narrow defence needs. These include particularly biotechnology, alternative fuels, material technology, and quantum technology.

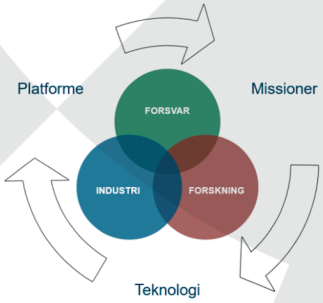
In the short term, there is an opportunity to **explore increased Danish involvement and possible domestic production within key-areas such as air surveillance** (both space technologies and drones), maritime capabilities (in the form of both ships and underwater technology), as well as artificial intelligence and enhanced system integration. This also applies to cyber technology and green fuels.

To realize the potential, **there is a need for a dedicated national framework for research support**, which should interact with, among others, the new Danish Defense Fund and other parts of society – including civil funds, the EU, and the Danish defence ecosystem.

With the heightened geopolitical competition and investments by other European countries, **defence technology can be expected to become increasingly important for Denmark's long-term competitiveness and innovation capacity overall.**

There will be **a need for a broad boost to security around both critical technologies** in a broad sense and a scaled-up defence technological effort more concretely.

Based on each of the established knowledge environments, it is proposed that a closer and more structured "triple helix" collaboration has to be established, where research, industry, and defence jointly develop platforms, missions, and specific technologies that can feed into European value chains and be used by the Danish defense.



Triple helix