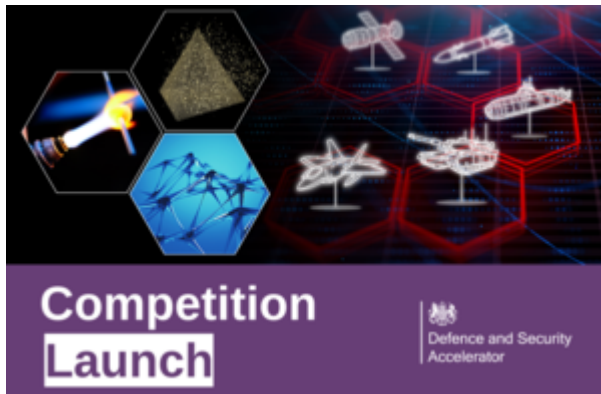


# [DASA seeks Advanced Materials innovations to shape the future of defence](#)

News story

DASA has launched a new Innovation Focus Area to find Advanced Materials innovations to support generation-after-next defence capabilities



- DASA has launched a new Innovation Focus Area (IFA) called Advanced Materials for Defence
- Funding provided by the Defence Science and Technology Laboratory's (Dstl) Advanced Materials Programme
- This IFA seeks Advanced Materials innovations across 2 challenge areas

The [Defence and Security Accelerator](#) (DASA) is pleased to launch a new Innovation Focus Area (IFA), [Advanced Materials for Defence](#). Advanced Materials is identified in the [Defence Technology Framework](#) as a critical technology family to drive innovation across defence. This IFA aims to harness these strengths in the UK landscape to provide innovative solutions in Advanced Materials to support generation-after-next defence capabilities.

DASA seeks innovations across two challenge areas:

- Challenge 1: Intelligent materials and structures
- Challenge 2: Materials for enhanced thermal management

## **Key dates and funding**

This Innovation Focus Area will run for at least [two funding cycles of the Open Call](#).

DASA expects to fund several proposals between £100K – £300K.

Do you have a novel idea or concept? [Read the full IFA document and submit a](#)

[proposal](#).

## **Advanced Materials for Defence challenge areas**

This IFA has 2 challenge areas.

### **Challenge 1: Intelligent materials and structures**

This challenge is focused on materials and structures that can either sense changes in their environment, actuate a change under extreme environmental conditions, or a combination of both. This challenge is also concerned with the lifing and ageing of deployable or morphing structures.

For this challenge area, DASA seeks innovations that consider operating environments such as:

- Complex weapons: Smart / functional structural materials
- Air: Materials to reduce maintenance requirements
- Space: Techniques for assessing the ageing and degradation of materials used in deployable systems
- Land: New technologies for material condition, self-diagnosis and repair, and novel multi-functional materials to support survivability through improved concealment
- Maritime: Develop technologies to support the rapid build, modification and deployment of naval vessels across different operating environments

In addition to the operating environments listed above, this IFA is also interested in understanding emerging innovations in functional, animate and metamaterials under the FAME project. The FAME project focusses on the development of vital enabling materials knowledge, concepts and technologies for later exploitation into systems. FAME is a cross-cutting project that encompasses all operating environments.

### **Challenge 2: Materials for enhanced thermal management**

This challenge is focused on materials and structures that can withstand extremes of temperatures.

For this challenge area, DASA seeks innovations that consider operating environments such as:

- Complex weapons: Materials to enable increased endurance, range or operating temperatures
- Air: Materials to help reduce mass, volume and cost of thermal management systems and enhance other areas of performance
- Land: Materials to enhance the survivability and sustainment of platforms and users
- Maritime: Materials to improve the effectiveness of thermal management systems for on-board systems, allowing more heat transfer to take place in the same space

For a more detailed breakdown this IFA's challenge areas, [read the full IFA document](#).

## Submit a proposal

Do you have an Advanced Material innovation that will support generation-after-next defence capabilities?

[Learn more and submit a proposal](#).

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