

The Materials and Structures Technology (MAST) Programme brings together more than 80 organisations to deliver a cost effective, coherent and integrated materials and structures research programme that addresses the specific needs of defence and security.



The LO programme is sustaining the UK sovereign capability in LO material research. It aims to identify and understand breakthroughs in science and technology to meet current and future survivability needs across all military domains with affordable solutions.

Through the application of improved structural materials, the programme seeks to enhance the survivability, mobility, deployability, performance and combat effectiveness of equipment and to reduce platform costs/weight and the maintenance/logistics burden.

The programme consists of two core work packages: Low Observable (LO) materials and Advanced Materials and Structures (AMS).

The AMS programme delivers a balanced, coherent and reactive research programme future-proofing defence capability from advances in materials and structures technology. AMS covers all structural and functional materials as well as issues relating to through-life capability management and support to operations. The LO and AMS programmes are supported by innovation and studentship programmes.

Approximate funding (2015/16):

£7 million - 90% is delivered externally*

*The 2015/16 funding is a projected forecast and is subject to change in-year.



Working in partnership

Working with BAE Systems and Queen Mary University of London, the MAST programme has created a novel composite material which has been used to manufacture a new type of antenna lens. In the future, this lens could be manufactured to the shape of a wing leading edge enabling future unmanned air vehicles to have improved aerodynamic properties, reduced weight and simpler integration. The feasibility study for this work won the BAES Chairman's Silver Award 2014 for Innovation.

Some aspects of this programme may be contracted through a number of mechanisms throughout the 2015/16 year.

Details of these routes to contracting can be found in the 'How to sell to Dstl - get involved' factsheet.

For more information about this programme please contact: centralenquiries@dstl.gov.uk.