

Dstl trials innovative solutions to 'wet gap' military challenge

Amphibious vehicles, bottom-crawling robots and drones with autonomous control.

It is hard to believe that these diverse and incredible feats of innovation are all potential solutions to the same military challenge.

The Map the Gap competition, run by Dstl on behalf of DASA, aims to find new ways to help UK Armed Forces cross a body of water, or 'wet gap', safely and covertly while increasing the tempo of operations.

Dstl Senior Principal Analyst Nicole Beaves said:

The scientific and technological knowledge we provide gives commanders more options and our military a critical advantage.

This competition has brought together some of the top minds in industry and led to a diverse range of cutting-edge solutions.

These impressive prototypes show incredible creativity and innovation combined with top-level technical expertise.

Map the Gap

Five suppliers received a total of £1.2m in funding to complete [phase 1 of the Map the Gap competition](#).

A bottom crawler by Wight Ocean was developed, and Digital Concepts Engineering demonstrated their teamed bottom crawler and drone.

Nordic Unmanned AS and Scytronix used advanced drone technology and Foundry Cube in collaboration with Ultrabeam Hydrographic made an amphibious vehicle.

The competition started in February 2020 and trials took place earlier this year. [Phase 2](#) offered £2 million to fund multiple projects.

The prototypes are expected to retrieve vital information such as the depth and flow of the water, the distance between both banks and their respective heights, and the ground-bearing capacity of the nearby land.

Robert Hammond-Smith, DASA Delivery Manager said:

The international reputation of Dstl helped attract proposals from as far away as America and Norway, as well as the UK.

We had about 20 proposals and we took forward five of these with

different approaches to the problem and different expertise.

Our competitions attract the top minds in industry, academia and the military. Often we are key in turning an SME concept into a reality.

Potential suppliers and partners can find out about [competitions being run by DASA on behalf of Dstl](#) and other [ways to work with us](#), as well as our [current priorities for funding and research](#).