DASA awards £2m to fast-track autonomous vehicles in harsh conditions

The Defence and Security Accelerator (DASA) can today announce it has awarded 21 contracts worth a total £2.1 million to boost how autonomous vehicles and systems operate in challenging environments.

<u>DASA</u>, on behalf of the <u>Defence Science and Technology Laboratory (Dstl)</u>, launched the <u>Autonomy in a Dynamic World</u> competition last year seeking proposals for innovative solutions and novel techniques to improve the way autonomous systems work in conditions such as rugged landscapes, dense vegetation, varying wind speeds and sea states – and man-made conditions such as congested and contested electromagnetic spaces.

The call also sought solutions to the Human-Autonomy Teaming (HAT) problem – the effective integration of humans, Artificial Intelligence (AI) and robotics into military systems.

All these factors affect the military effectiveness of current autonomous technologies.

Project manager Helen Mullender said:

The work being funded is to mature autonomous systems with the capability to operate on demand, under all conditions that may be encountered.

Military operations are undertaken in all kinds of challenging environment. The inclusion of autonomous systems in these operations will demand their ability to operate effectively and efficiently regardless of the environment.

DASA delivery manager Laurence Bickerton said:

DASA is pleased to be working with Dstl and some of the best and brightest minds in industry to provide a step change in the capability of unmanned autonomous military systems.

In society, we are becoming increasingly dependent and trusting of unmanned, autonomous and semi-autonomous systems to operate our machinery, cars and even our home deliveries.

Similarly, in defence, autonomous systems are driving a revolutionary change in military operations, transforming the battlespace with improved intelligence and mobility.

The competition is funded through the MOD's Chief Scientific Adviser's Research Programme's Autonomy Incubator project that aims to: Identify and develop underpinning research and technologies to support the development and fielding of unmanned systems across defence which may be matured through the Dstl Autonomy Programme and other Research and Development programmes.

The organisations that have been funded are:

- Animal Dynamics (3 proposals funded)
- Archangel
- Autonomous Devices Ltd (2 proposals funded)
- Beamagine SL
- Blue Bear Systems Research Ltd
- Createc
- Deep Vision
- Fleetonomy.ai
- Frazer-Nash Consultancy
- Horiba Mira
- Imperial College London
- Plextek Service Ltd (2 proposals funded)
- QinetiQ Business Unit Farnborough
- SeeByte Limited
- Sonardyne International Limited
- University of Dundee
- Zenotech Ltd

DASA — the MOD's innovation hub — finds and funds exploitable technology to give Her Majesty's Armed Forces and UK security a strategic advantage over adversaries while supporting the nation's prosperity.

DASA works with scientists from Dstl, academia, and industry to rapidly develop these new technologies.