

Press release: Autonomy on the frontline: Last Mile challenge winners announced

The Ministry of Defence (MOD) set industry and academia a challenge to design pioneering technology to get vital supplies to soldiers on the front line and the winners have now been chosen.

Part of MOD's Innovation Initiative, and led by MOD's Defence Science and Technology Laboratory (Dstl) with the Defence and Security Accelerator (DASA), the contracts are worth around £3.5 million over 3 years.

Dstl, in partnership with industry and academia, delivers defence and security science and technology (S&T) research for MOD and other government departments and allied organisations, looking to find the best solutions to UK defence and security challenges of today and the future.

Supplying troops in challenging environments – often dubbed 'the last mile' – using unmanned technology may reduce risk and cost. As announced at last year's Farnborough Airshow, Dstl is working with the US Department of Defense to accelerate and demonstrate the effective use of these new robotic and autonomous systems technologies, with UK troops testing prototypes by 2019.

Drawing on commercial technology and conceptual ideas, from online delivery systems to futuristic unmanned vehicles, more than 140 organisations from small and medium-sized enterprises to big defence companies submitted entries for the Last Mile challenge.

Winning ideas include autonomous hover-bikes, unmanned air and ground vehicles, novel means of autonomously loading and unloading, navigating and delivery ordering, management and control using 'uber-like' and other app-based technologies.

Twenty-five projects were chosen from organisations from the UK and worldwide with a total contract value for the 6-month first phase of almost £2 million to advance the technology towards a system solution for 'tactical resupply in a box'. The subsequent year-long phase will then go on to produce demonstrator system prototypes of the concepts, including evaluation with the British Army in October 2018 as part of the Army's Warfighter Experiment 'Autonomous Warrior (Land)' (AWE18), in addition to a potential demonstration in the US.

UK jobs will be created or secured from the project, with the majority of companies chosen being from Britain. The Innovation Initiative and £800 million Defence Innovation Fund aims to encourage imagination, ingenuity and entrepreneurship, to find twenty-first century solutions to rapidly emerging threats.

Dstl's lead for the challenge, Peter Stockel, said:

The number and quality of the entries for this competition was outstanding and the competition was fierce. We chose the best from across the proposals to enable the system solutions we want for prototype demonstration and evaluation. This was a fully open competition, with many of those down-selected happening to come from the UK. This illustrates the strength of our national capability and the benefit of recent investments in this important and rapidly developing technology sector. However, it was great to also be able to pick some great propositions from around the world. The brief is to rapidly demonstrate system solutions which aim to reduce the logistic burden on our Armed Forces, provide new operational capability and reduce casualties; so we're pleased with the response and keen to see the potential capability benefits being assessed by our military during AWE18.