

News story: New Competition: Take Cover!

Updated: Competition now open.

DASA has launched this competition to focus on protection from ballistic threats and fragmentation for soldiers on the front line. The protection against blast and directed energy threats would also be of interest. Chemical, Biological, Radiological and Nuclear (CBRN) threats are outside the scope of this competition.

The [competition](#) is intended to find a solution that will protect multiple soldiers rather than be used for individual soldier personal protection (such as body armour).

The programme is expected to have a duration of three years with multiple phases. Up to £600k is available for Phase 1 for six month duration projects. Over £1m of additional funding may be available for future phases.

This competition is now open and closes at midday 24 October 2018.

If you have any queries on this competition, please do contact us at accelerator@dstl.gov.uk or [sign up for alerts](#) on our news pages.

News story: MOD appeal for families of missing or killed soldiers from the Korean War

At the recent United States-Democratic People's Republic of Korea (DPRK) Summit, President Trump and Kim Jong Un signed the Sentosa Agreement, which included a commitment to recover remains from the DPRK and return them to the US, where they will be identified.

The remains may include UK casualties and the DNA samples will be used to support identification, over a number of years, to make sure any UK personnel identified are ultimately given military funerals at the United Nations cemetery in the Republic of Korea. The MOD also intend to cover costs for immediate family members to attend.

UK personnel fought during the Korean War as part of the United Nations Command (UNC). The three-year conflict between 1950 and 1953 led to the loss

of hundreds of thousands of lives from Korea, China and the UNC.

Family members of those missing personnel who have no known grave are asked to call the Joint Casualty and Compassionate Centre on 01452 854622/855258.

News story: DASA funded innovation set to make MOD significant aircraft and fleet support savings

The two-stage recurrent neural network is being developed by a company called decisionLab and is being sponsored by Joint Forces Command and funded by the MOD's Defence Innovation Fund through the Defence and Security Accelerator's (DASA) fast track 'Revolutionise the human information relationship for Defence' competition.

Originally developed for the civilian aviation market, this research funding has enabled the product to be redeveloped to be suitable for the military market.

It's hoped it will in time provide an insight into the future, allowing maintenance engineers to view the status of their systems and the predicted health of that system a day, week, or even a fortnight in advance.

Gripped by this opportunity, the Royal Navy has invested £150,000 in the development of this neural network for exploitation on-board a Type 45 destroyer, and pull through onto the Type 26 – if proven successful.

A Royal Navy ship is incredibly complex, and the Type 45's systems can record 10 million data points a day. With such a huge and complex dataset, the type of machine learning offered by the neural network will likely have a significant impact on maintenance schedules and support, improving capability, saving money and delivering efficiency.

At present, decisionLab is training their neural network on 1.8 billion lines of Type 45 Platform Management System data. Each day the system gets smarter and more capable, and under current development plans this system will be installed onboard HMS DIAMOND for a trial in the summer. It will allow the user to validate system assumptions and help contextualise events to further train and improve the model.

Lee Packer, Innovation Programme Manager for the Royal Navy said –

"The Defence and Security Accelerator competitions provide the Royal Navy with a unique opportunity to both engage with a broad spectrum of small to medium sized enterprises whom are often new to the Defence market, and to

grip technological opportunities from disruptive markets and apply them to Defence problems. This rapid development process, with collaboration at its core, will provide battle-winning capabilities to the hands of the user.”

Joe Hemming, Exploitation Lead for DASA said –

“This is a clear demonstration of the cultural shift across all organisations to focus on capability integration and exploitation as well as technology development. This project is a great example of collaboration between DASA, the competition sponsors (Joint Force Command) and the front lines working hard to turn technology into true capability.

The Navy’s commitment to integrate the DecisionLabs project onto existing architecture will help provide an accurate value proposition for future procurement across the maritime capability and possibly beyond.”

About the competition

The ‘Revolutionise the human information relationship for Defence’ competition was the first competition launched since the start of DASA in December 2016. 34 projects were awarded funding with decisionLab being 1 of 7 to receive phase 1 fast track funding under Challenge 2. In October 2017, DecisionLab was one of two companies to successfully progress to Phase 2 to continue their development of their neural network system.

[News story: MOD to review Armed Forces exemption from UN Convention on the Rights of Persons with Disabilities](#)

The exemption means that the armed forces are not required by law, to recruit or retain personnel with a condition that may be disabling under UK law.

Disability is defined as a person with ‘a physical or mental impairment, which has a substantial and long-term adverse effect on the ability to carry out normal day-to-day activities.’ In a practical sense, this includes a broad range of physical and mental conditions, including cancer and multiple sclerosis, to arthritis and mental health.

As part of the UK’s obligations to the UN’s Convention on the Rights of Persons with Disabilities, every five years it must look again at the armed forces’ exemption and review whether it is still appropriate.

The review will look at how the exemption affects the operational capability of the armed forces and our personnel and will examine if alternative options could better support personnel without any negative impact on operational

effectiveness.

To achieve this, the review will look at how the military compares with the blue light services, to understand how being part of the Convention affects their workforces. The MOD will also work with other nations to share perspectives and best practice.

Personnel with a disability already serve in a variety of roles across the Armed Forces, and while the MOD does not currently hold exact figures on military personnel with a disability, the department plans to enable better data collection in the future.

Minister for Defence People and Veterans Tobias Ellwood said:

In an ever-changing world, we need to ensure that the armed forces maintain their operational effectiveness, while at the same time looking after all of our personnel who serve.

This review demonstrates that we are taking the issue of disability seriously and that we are open-minded in our approach.

The MOD has recently established a number of initiatives to support disabled personnel as they serve their country, including appointing an Armed Forces Disability Champion and establishing a network for Service personnel, Carers and some veterans with a life-changing or life-limiting condition or a disability.

The review will start early in 2019.

[News story: F-35 jets use new vertical landing pads at RAF Marham for the first time](#)

To support the aircraft's short take off vertical landing (STOVL) capability, the Defence Infrastructure Organisation is building three VLPs through its contractors, a joint venture between Galliford Try and Lagan Construction, at RAF Marham. The Norfolk site is the Main Operating Base for the F-35 in the UK.

The F-35's STOVL capability will provide operational flexibility including landing on the Royal Navy's new Queen Elizabeth Class aircraft carriers. Initial flight trials of the F-35 Lightning aircraft from HMS Queen Elizabeth are on track for 2018, allowing a coherent build-up towards delivering a carrier strike capability for the UK from 2020.

Construction presented a significant engineering challenge. Due to standard concrete not being suitable, the design team had to source special materials from Germany to make a concrete which has the ability to withstand the high temperatures created by aircraft engines. Without this there would be a risk of cracking which in turn could present significant risk to the aircraft. This was the first time this material has been used outside the USA and required a rigorous testing process to ensure the landing pads were fit for purpose.

Lt Col Ian Jenkins, Defence Infrastructure Organisation Project Manager for the VLPs, said:

Vertical landing is a really exciting military capability and from an infrastructure perspective it's been fascinating to be involved in the design and construction process. It was really exciting and rewarding to see an F-35 landing on the first vertical landing pad to be finished and I look forward to seeing more as we continue to work on other infrastructure upgrades required for the F-35s.

Each landing pad measures 67m long and 67m wide, with a central landing area of 30.5m by 30.5m.

Four F-35B Lightning aircraft arrived at their new home at RAF Marham on 6 June this year, starting the build-up of the newly-reformed 617 Squadron in the UK. The successful first use of these new VLPs is another step closer towards successfully reaching Initial Operating Capability for the UK by the end of the year.

In addition to its short take off and vertical landing capability, the F-35B's unique combination of stealth, cutting-edge radar, sensor technology, and electronic warfare systems bring all of capabilities of a fifth-generation fighter.