

News story: Exercise Combined Joint Atlantic Serpent 2018

Personnel from 6 nations will spend a fortnight being put through their paces at the York Army Medical Services Training Centre. They will work alongside each other in a simulated field hospital environment practicing realistic deployed hospital scenarios. The medical teams that deploy on North Atlantic Treaty Organisation (NATO) and other coalition operations are typically multinational teams; Exercise CJAS 18 provides an opportunity for these nations to work and train together to provide the highest standards of medical care when on operations.

Oberfeldwebel (Leading Field Usher) Schurman, a Radiographer from Germany said

So far I have been really impressed, we run similar exercises in Germany but not always to the same level of detail as I have received today.

Maj Olveti, an Emergency Medicine Consultant from Estonia said

I am really looking forward to achieving a deeper level of integration, building on the experiences gained by my Estonian colleagues who deployed to Afghanistan with the UK in recent years.



Reservists from 205 (Scottish) and 256 (City of London) Field Hospitals training with US Air Force medical personnel at AMSTC. MOD Crown Copyright.

The exercise that takes place from 22 September to 5 October 2018 will deliver a multinational field hospital supported by up to 400 medical personnel. Since 2014, UK and US medical personnel have been working closely together and this year the international participation has expanded to include up to sixty personnel not just from the United States but also from Canada, Germany, Norway and Estonia.

Personnel taking part from the UK include Reservists from 205 and 256 Field Hospitals with support from an Royal Air Force Medical Enhanced Response Team, a Critical Care in the Air Support Team, and an Aeromedical Support Unit from 612 and 4626 RAF Squadrons. Specialised clinical support to the exercise is being provided 34 Field Hospital, Headquarters Tactical Medical Wing and the Defence Medical Group to deliver induction training, department familiarisation, casualty managers and to conduct the exercise assessment.



Familiarisation training in the emergency department bay at AMSTC for troops from (left to right) Estonia (Defence Medical School), UK (205 Fd Hosp), US and Germany (Medical Regt 2). MOD Crown Copyright.

The Defence Medical Services is committed to delivering UK led multinational health service support. The ability to deliver a multinational health solution is a critical enabler to the overall success of NATO and coalition operations.

[News story: Wearable technology for injury prevention – market exploration](#)

The Defence and Security Accelerator (DASA) are scoping the potential for an innovation competition addressing injury prevention in the British Army by means of wearable technology. We would like to engage the market to explore market interest and to aid the scope and design of a potential future competition in advance of launch. This will provide us with an understanding of what already exists for injury prevention that can be adapted for military use as well as truly novel solutions.

Background

A study in December 2017 showed that 19.8% of personnel were medically downgraded. Of the physical injuries represented in this figure the most common were musculoskeletal injury (MSKI), environmental injury (from heat and cold) and noise induced hearing loss (NIHL). As with any organisation requiring a physical presence there is an irreducible minimum. The best sports teams work with a 7 to 12% margin for all illnesses and this accords with Commander Field Army's target of 90% deployability. In addition to the human cost behind these figures the rehabilitation of manpower capability accounts for over £100 million per annum.

The British Army is seeking rapid innovations to improve the deployability and overall health of service personnel through the use of data science and technology. The aspiration is to employ practical sensors (wearable technology) that will provide indicators and warnings prior to injury; to allow for early intervention and prevention of injuries.

The three focus areas for this market exploration are:

1. MSKI prevention: MSKI is recognised as the leading cause of medical discharge in the British Army. The study showed that 61% of the Army's non deployable personnel were as a result of MSKI, of which the average soldier took 9.5 months to fully recover
2. environmental injury prevention: heat and non-freezing cold injuries (NFCI) accounted for 2.5% of downgraded service personnel
3. NIHL prevention: 5% of service personnel downgraded were due to NIHL, an increase on the previous year

All three areas are significantly impacting the operational effectiveness of the British Army notwithstanding the personal impact on our personnel.

What we want

We are interested in potential solutions that utilise science and technology as a means to prevent, not treat, injury in service personnel. We are looking for novel methods to provide early warning or prevention methods for physical injury, specifically using practical wearable technology.

We are also interested in ideas involving novel approaches to the data management and subsequent identification of issues using existing technology.

In the long term any technology must be scalable across the whole force, and should be compatible with the realities of military usage, such as robustness, and cyber security.

We are interested in potential solutions that aim to address any or all of the areas at any level of maturity, particularly those that are at a higher technology level which could be trialled within 6 months. Potential solutions should be presented by teams with the experience and knowledge necessary to establish sound scientific evidence for any potential technology.

By completing the Capability Submission Form neither the Government nor yourselves are committing to anything, but your submissions will be used to help focus the direction of the work and the requirements for a possible themed call in this area in the future.

What we do not want

We are not interested in literature reviews, paper-based studies, preventative medicine, non-technical solutions or marginal improvements to existing capabilities.

We are not interested in static scanning technologies or invasive technologies.

We are not interested in any novel theories for biomarkers or proxies for emerging issues which do not have a sound established scientific basis in the literature.

How to submit a Capability Submission Form

Complete the attached short form
[Capability Submission Form for Wearable Technology](#)
(ODT, 867KB)

, noting the word limits, and then email it to accelerator@dstl.gov.uk by midday 19 October 2018.

Please only provide details of one product or capability per form. If you have a number of potential solutions then please submit multiple forms.

If you have any questions then please email accelerator@dstl.gov.uk with Wearable Technology in the subject line.

How we use your information

Information you provide to us in a capability submission form, that is not already available to us from other sources, will be handled in-confidence. By submitting a capability submission form you are giving us permission to keep and use the information for our internal purposes, and to provide the information onwards, in-confidence, within UK Government. DASA will not use or disclose the information for any other purpose, without first requesting permission to do so.

[News story: Defence Secretary reveals](#)

new generation of 'cyber cadets'

The Cadets CyberFirst programme, delivered by Ministry of Defence cadet organisations and the GCHQ National Cyber Security Centre, will equip over 2,000 cadets a year with the skills and expertise to become future leaders in this emerging industry.

Over £1 million will be invested in the programme each year, giving cadets the opportunity to learn how to protect systems connected to the internet from cyber attacks. Cadets will be able to choose from introductory courses covering the tools, knowledge and skills to protect small networks, to more advanced courses where they will be fully immersed in cyber security issues.

The new initiative comes as the Defence Secretary also reveals plans to increase the number of cadets in school units to 60,000 by 2024 and celebrate their achievements through a National Cadet Week.

The annual week will give communities and families, along with local dignitaries and MPs, the chance to celebrate the great work cadets and their volunteer adult instructors do across the UK.

Defence Secretary Gavin Williamson said:

We live in a modern world where our phones are rarely out of our hands and we rely on computers to make daily tasks easier. Cyber threats to the UK are constantly evolving and this exciting initiative to train and develop 'cyber cadets' – the first of its kind in a NATO state – reaffirms our leading role in tackling security threats head on.

It is important to recognise the vital role cadets play in our communities, and I am determined to grow the number of young people signing up and make sure their successes are properly recognised each year.

The UK faces a real and growing cyber threat and it is important we have the right skills to combat the constantly evolving risk. In its first year, the National Cyber Security Centre received over 1,100 cyber incident reports.

The new cadet training programme will build on GCHQ's CyberFirst initiative, which aims to teach young people the fundamentals of cyber security. It will also offer a 'train the trainer' course, which will teach more than 50 Cadet Force Adult Volunteers so they can deliver this exciting cadet training programme in the future.

The Defence Secretary's commitment to cadets will also be revealed through ambitious plans to increase the number of cadets in schools from 43,000 to 60,000, giving even more young people the opportunity to learn new skills by joining a cadet unit.

Considerable progress is already underway thanks to the Cadet Expansion Programme (CEP), the Government funded scheme that aims to have a total of 500 cadet units running in the UK by 2020.

Earlier this week, the Defence Secretary visited Aston University Engineering Academy, a state school with the RAF Cadet Force, where he announced the approval of 30 new cadet units across schools in the UK.

Being part of a cadet unit is proven to bring significant benefits to young people, with a recent University of Northampton report demonstrating a positive impact on young people's self-belief and their attitude towards school.

Specifically, it found that joining a cadet force improved a young person's resilience, teamwork and communication skills as well as increasing social mobility.

[News story: Defence Secretary announces new Defence Arctic Strategy](#)

The strategy will enhance the Ministry of Defence's focus on the Arctic, underlined by our current commitments in the region and future deployments.

Defence Secretary Gavin Williamson said:

As the ice melts and new shipping routes emerge, the significance of the High North and Arctic region increases.

Russia, with more submarines operating under the ice and ambitions to build over 100 facilities in the Arctic, are staking a claim and militarising the region. We must be ready to deal with all threats as they emerge.

The change in the natural environment in the Arctic and High North is driving a change in the security environment and, as the region becomes more accessible, there has been an increase in military activity. The new Defence Arctic Strategy will put the Arctic and the High North central to the security of the United Kingdom.

Currently, the Royal Marines conduct cold weather training in Norway on an annual basis, with around 800 due to deploy in 2019. As part of the new Arctic strategy, the Marines training will become joint with Norway on a long-term basis and integrated into Norway's defence plan, providing UK troops a unique opportunity to train alongside a key ally.

The strategy will also complement our NATO commitments and in 2019, four RAF Typhoons will for the first time patrol Icelandic skies. This will allow the UK to work closely with allies to deter aerial threats to Euro Atlantic security. The mission will also provide the RAF with unique opportunities to test its skills in different environments.

In 2020 we will also increase our operational commitments in the area with the introduction of new P-8 Poseidon aircraft. Based out of RAF Lossiemouth, the sub-hunters will help combat a range of intensifying threats, not least increasing submarine activity in the Arctic.

This increased submarine activity poses a new threat and is something the Royal Navy is ready to combat. In 2018, a Royal Navy submarine took part in ICEX with the US Navy for the first time in ten years and as part of the new Defence Arctic Strategy, the Navy will mount regular under-ice deployments in the years to come.

[News story: UK to maintain military presence in Germany](#)

Around 185 British Army personnel and 60 Ministry of Defence civilians will remain in Germany, once the withdrawal of British Army units to the UK has been completed.

Defence Secretary Gavin Williamson said:

We are increasing our British points of presence across the world. We will not be closing our facilities in Germany, and instead use them to forward base the Army.

Army personnel will be permanently based in the country where the UK is retaining the 45-square mile Sennelager Training Area, which provides both UK and NATO forces with an expansive live firing training area. It has a long tradition as a home from home for British service personnel.

The remaining Army personnel will also support critical NATO infrastructure and assets such as the combined river crossing capability based in Minden. It uses M3 vehicles jointly operated by British and German troops, and both nations are currently in discussions regarding a future bilateral upgrade of the vehicles.

Retaining Sennelager alongside the adjacent Athlone Barracks will provide remaining British personnel with the vital domestic infrastructure, including housing and schooling.

Elsewhere the Army is maintaining a presence at the Ayrshire Barracks in Mönchengladbach, where approximately 2,000 vehicles can be stored, and the German Wulfen Defence Munitions Storage Facility, which holds operational ammunition.