# Show us the numbers: Can data from wearable technology improve soldier wellbeing?

Wearable devices are of interest in the defence community as a way of gathering data that can be applied in tools that support and protect the capabilities of soldiers. By utilising the power of wearable sensors to collect physiological data (physical or molecular parameters) in real-time, we may be able to accurately monitor for signs of injury and potentially predict these injuries before they occur. The overall objective being to maintain and improve soldier health and wellbeing.

To date, there remain gaps in the evidence base to support what metrics can be robustly measured by wearable technologies and how data from these platforms might demonstrably improve decision-making in a defence context.

The <u>Defence and Science Technology Laboratory</u> (Dstl) therefore seeks to understand what metrics can be reliably collected to provide credible value to the defence community (i.e. are of value in supporting confident decision making). On their behalf, the <u>Defence and Security Accelerator</u> (DASA) is pleased to launch a new Innovation Focus Area (IFA): <u>Next Generation Wearable Technology</u>.

This Innovation Focus Area seeks demonstrations of what data can be gathered from wearable technology, and how this data might support more effective decision-making by defence users to prevent injury to defence personnel.

Can you help? Read the competition document now and submit your idea

#### How much funding is available?

DASA expects to fund proposals within  $\underline{\text{Technical Readiness Level}}\ 3-6\ (\text{TRLs})$  up to £200K for a 12 month contract

Read the full competition document to find out more

### Seeking demonstrations of wearable tech that provide robust, actionable insight

DASA and DSTL want to understand what metrics we can collect from wearable technology platforms, and how they add value to defence end users. In addition, we seek proposals that show how wearable technology can provide actionable insight to inform decision-making pathways regarding health and wellbeing.

#### What solutions are we looking for?

This IFA focuses on 2 key themes:

#### Theme 1

Demonstration of new sensor technologies and of the data generated from these sensors against existing validated measures.

And/or

#### Theme 2

Exploitation of data from current or novel wearable systems to provide prognostic insights into human health and wellbeing.

Technologies may include:

- demonstration of measurements that cannot be made by wearable technologies, such as hydration status, a stress marker, cardiac measure or other, pertinent metric
- improvements in quality, robustness and longevity of measurements that can be made using wearable devices
- form factors that enable collection of data in a minimally intrusive format and thus may be more exploitable for defence customers
- experimentation using wearable sensors in combination with data analysis to measure environmental effect on individuals
- physical, psychological and environmental stressors such as heat or cold, altitude, infection and acute and chronic stress, relative to participant specific baselines

Read the full competition document to find out more

### Have a novel idea that shows the value of wearable technology?

If you have an in-depth understanding of emerging capabilities, technologies, initiatives and novel approaches that may help us understand the capabilities of wearable technologies, we want to hear from you.

The closing date for proposals of this IFA is 05 January 2022 at midday BST. A second cycle will run from 05 January 2022 to 02 March 2022.

#### Oldham man who stabbed partner will

#### spend longer in prison

News story

Stephen John Turnock has had his sentence increased after it was referred to the Court of Appeal by the then Solicitor General.



A man who violently attacked his partner over two days has had his sentence increased after it was referred to the Court of Appeal by the then Solicitor General.

On the afternoon of Saturday, 15 May 2021 Stephen John Turnock, 40, was at home with his partner when they started to argue. The offender flipped over the kitchen table and chased the victim upstairs. Turnock then struck her to the face before cutting her left hand with a knife while she tried to defend herself. He continued to beat her but eventually calmed down.

The next morning, when the victim woke up, Turnock stabbed her several more times, including to the neck and chest. He then threw items at her, shaved her hair and damaged her clothes. After he had left, the victim was able to contact the police.

She had suffered multiple injuries, including four separate stab wounds and a laceration to her hand that required surgery.

On 16 August 2021, Turnock was sentenced to 4 years' imprisonment for wounding with intent at Manchester Minshull Street Crown Court. He also had a restraining order imposed on him.

Following the sentence, the then Solicitor General referred Turnock's sentence to the Court of Appeal under the Unduly Lenient Sentence (ULS) scheme. On 21 October the Court of Appeal found his original sentence to be unduly lenient and increased it to 7 years and 6 months' imprisonment.

Speaking after the hearing, the Solicitor General, Alex Chalk QC MP said:

This was a shocking and cowardly attack on a defenceless woman. This kind of violence is even more serious for having taken place in the home. I am pleased that Turnock's sentence has been increased and I hope that the victim finds some comfort in the Court's decision.

Published 21 October 2021

## Cycle 3 of Defence Innovation Loans now open

The <u>Defence and Security Accelerator</u> (DASA) is pleased to launch Cycle 3 of <u>Defence Innovation Loans</u> which has £10 million to lend for innovative defence solutions.

Accessible to SMEs, and with a below market interest rate of 7.4% per annum, the Defence Innovation Loan provides an excellent opportunity to apply for affordable funds to help you commercialise your defence solutions.

Defence Innovation Loans: An introduction

<u>Defence Innovation Loans: An introduction</u>

#### How to apply?

Check out the full document and submit your idea.

#### Defence Innovation Loans Webinar

On Thursday 9th September, DASA and <u>Innovate UK</u> hosted a live webinar to answer all of your questions about Defence Innovation Loans, where viewers spoke to our panel of experts about how to submit a successful application.

Defence Innovation Loans: Webinar

#### Watch our previous webinar

We received some great questions during our last Defence Innovation Loans webinar. Catch up on what you missed here.

For more Defence Innovation Loans content, check out our video playlist

#### How much is available for a Defence Innovation

#### Loan?

The total of £10 million is available for the Defence Innovation Loan competition this year, of which comprises £5M from the Defence Innovation Fund and £5M from Army.

You can apply for a loan between £250,000 and £1.6 million with a below market interest rate of 7.4% per annum. This loan can cover up to 100% of eligible project costs to aid the commercialisation of the solution and overall term of the loan must not exceed 7 years.

Please note, <u>Innovate UK</u> will carry out the Defence Innovation Loan credit evaluation and you will enter into a loan agreement and security agreement with Innovate UK Loans Ltd.

Read the full DASA competition document for more information on Defence Innovation Loans.

#### Who can apply for a Defence Innovation Loan?

To apply for a Defence Innovation Loan you must:

- be a UK registered SME
- intend to exploit the results in the UK or overseas to make a significant and positive impact on the UK economy and/or productivity
- give evidence that your business is suitable to take on a loan

Please note, individuals, academic institutions, research organisations and large companies are not eligible for innovation loans.

### What kind of innovation will be considered for a loan?

Defence Innovation Loans are open to innovative ideas to improve the defence of the UK. Your innovation must be mature at TRL 6 or above, to ensure the solution can be commercialised within the time scale of the Innovation Loan. There also must clearly be evidence of a defence need for the innovative solution.

#### Two tracks of funding

The Defence Innovation Loan has two tracks of funding, covering general Defence solutions and more specific solutions for the Army.

#### Track 1: Defence Innovation Fund (£5M)

Track 1 is open to innovative ideas to improve the Defence of the UK.

#### Track 2: Army Innovation Fund (£5M)

Track 2 is open to innovations which align with any of the priority areas

below and targets an Army end user.

Priority areas include:

- Army industrial engagement framework decision-support
- directed energy weapons
- human performance enhancement
- information advantage
- robotics and autonomous systems
- and more...

#### Ready to apply?

Read the full <u>DASA competition document here</u>.

For more on Defence Innovation Loans, watch the video below:

Defence Innovation Loans: Everything you need to know

<u>Defence Innovation Loans: Everything you need to know</u>

# <u>Call for evidence: An inspection of</u> <u>the immigration system as it relates</u> <u>to the higher education sector</u>

News story

The Independent Chief Inspector invites anyone with knowledge and experience of the interaction between the UK immigration system and the higher education sector to submit evidence to inform an inspection of this area.



The Independent Chief Inspector of Borders and Immigration has begun an inspection of the relationship between the immigration system and the higher

education sector and is inviting anyone with relevant professional knowledge or personal experience to submit evidence to <a href="mailto:education@icibi.gov.uk">education@icibi.gov.uk</a>.

This call for evidence will remain open until 15 November 2021.

The Independent Chief Inspector is interested in assessing the extent to which the Home Office's immigration functions support the objectives laid out in the UK Government's <u>International Education Strategy</u>, as updated in February 2021. To that end, it is expected that this inspection will adopt a broad perspective on the interaction between the UK's immigration system and the higher education sector, examining such areas as:

- the efficiency and effectiveness of the post-EU exit points-based immigration system for international students and staff
- the sufficiency of provision for the mobility of short-term students, academic visitors and individuals undertaking permitted paid engagements
- the extent and quality of communication and engagement between the Home Office and the higher education sector
- the fitness for purpose of the Home Office's licencing system for visa sponsorship, including compliance requirements
- the availability and usefulness to the higher education sector of guidance for study and work applications
- the quality of service and consistency of information provided to participating higher education institutions by the Home Office's Premium Customer Service schemes
- the competitiveness of the UK's immigration "offer" to international students and staff, including such considerations as: cost, ease of navigating the system, accessibility for dependents, and availability of post-study immigration routes

The Independent Chief Inspector would be pleased to hear both what is working well and what could be improved. Information received in response to this call for evidence will play an important part in defining the scope and focus of the inspection. Submissions touching on any and all areas of interest to the sector, including those that may not be mentioned above, are therefore welcome.

The information you submit may be quoted in the final inspection report, but it is the ICIBI's practice not to name sources and to anonymise as much as possible any examples or case studies.

#### Data Protection

In accordance with the General Data Protection Regulations (GDPR) we need your permission to process and retain the information you submit. By clicking <a href="here">here</a> a consent statement will automatically be added to your email.

Alternatively, or if you are using a non-compatible email client, then please send your submission to <a href="mailto:education@icibi.gov.uk">education@icibi.gov.uk</a>, with 'Higher education sector call for evidence' in the subject line and the following consent statement in the body of your email:

"I consent to the Independent Chief Inspector of Borders and Immigration retaining and processing the information and data in this email."

Published 21 October 2021

# Giving an ex-offender a second chance can be a win-win for business, says Deputy Prime Minister

- new polling shows widespread support for businesses which recruit prison leavers
- over 90 percent of businesses already doing it highlight the reliability of such staff

New polling commissioned by the Ministry of Justice has found that over 90 percent of businesses that employ ex-offenders said that they are reliable, good at their job, punctual and trustworthy.

The Deputy Prime Minister unveiled the research ahead of a summit designed to cut crime by boosting the number of prison leavers who get a job.

Following careful vetting and employment security checks, prisoners are already employed in certain industries like agriculture, construction and transportation.

The Deputy Prime Minister set out his ambition to increase the number of prisoners gaining skills and prison leavers in jobs six months after release, with employment known to cut reoffending rates by up to nine percentage points.

The research also showed over 80 percent thinking that businesses who give offenders a second chance are making a positive contribution to society.

Deputy Prime Minister, Lord Chancellor and Justice Secretary Dominic Raab said:

Giving an ex-offender a second chance can be win win for them and their employer. Business owners have told me ex-offenders are among the most reliable and motivated workers in their team — they have a desire to prove themselves trustworthy and they have something to lose.

It's a win for society too — ex-offender with jobs are paying their

taxes and are significantly more likely to turn their backs on crime and stay on the straight and narrow.

I want to see new opportunities for ex-offenders opening up and reoffending coming down.

He was speaking after a series of conversations with employers and a visit to Lyons Haulage in West Sussex on Wednesday where he met two serving prisoners who work as HGV drivers while on day release from HMP Ford.

Prisons like HMP Ford already partner with sectors facing staffing shortages including construction, hospitality and agriculture.

The Deputy Prime Minister told the summit that he wants prisons to build more links with local employers. He set out plans for every resettlement prison in the country to have a board of businesses providing advice so that training reflects the skills employers are looking for and challenge so that prison staff are focused on getting people into work.

He told the audience of hundreds of employers that prisons would play their part by making sure that jobs are well-advertised inside and that prisoners left with a CV that shows their skills, identification to prove their right to work and a bank account so they can get paid.

The <u>New Futures Network</u>, part of HM Prison and Probation Service, already supports over 400 businesses to work with prisons and probation staff to match serving and former prisoners with jobs.

The Recruiting Prison Leavers Summit is being attended by employers ranging from construction companies and manufacturers to hospitality businesses and retailers. They are hearing from ex-offenders including John, who now works for ready meal company COOK, Mo who works at construction firm Wates, and Stacey, who is employed by Timpsons.