News story: DASA Download: Innovation - it's all about the benefit

Seeking Innovations

I represent DASA in Central Southern England. I cover from Chippenham in the West to Slough in the East, and from Oxford in the North, down to Southampton and Portsmouth on the coast. It's an area that is flourishing with innovation, particularly among small businesses and academia. This is one of our busiest regions, with nearly £8m of innovative projects funded in the last two years. Two-thirds of this money has gone to SMEs, many of whom have never previously worked with us before.

Essentially, I am an innovation scout, seeking ideas that have relevance and benefit in the Defence and Security sectors. It's that relevance and benefit that's important here; I need to see that a technology or innovation could offer a real-world benefit before it will be considered for funding. In essence, it is not sufficient to be a ground-breaking idea, it's the potential benefit that really sells it. However, that benefit isn't always obvious on first discovery. For example, I came across a company that develop condition monitoring systems for industrial machines, that provide, for example, advance notice of when a component is about to fail or how many products have been completed. I took time to understand the technology and the company, and together we discovered that the same innovative idea can be adapted to detect illicit devices in buildings. DASA funded this company, under the Open Call competition, to trial the technology and one day soon, we could see a new novel surveillance capability for both Defence and Security use.

Bringing innovation alive

It is this sort of thinking that brings innovation alive for DASA. I work as part of a team of 12 Innovation Partners covering the length and breadth of the UK. We work together to support UK innovators, helping them engage with Government to devise and deliver real world innovation that not only benefits UK Defence and Security, but boosts UK prosperity as well. We are empowered to reach out to harness the most innovative ideas from all sectors of society. The potential is now there to integrate the latest thinking onto our Armed Forces as those technologies emerge — a feat that was not possible or perhaps a laborious and lengthy task only a few years ago.

Boots on the ground matter

To be able to positively contribute to my local economy gives me a deep sense of pride and is something that drives me to establish these innovation links. I also get to meet the most fascinating companies and academics with a broad range of technical expertise. A great example is Oxford Space Systems (OSS) who I first met after giving a talk to raise awareness of DASA. Our conversation led us to establish potential links between their pioneering

satellite antenna work and the Defence space research programme, which is managed by the Defence Science and Technology Laboratory (Dstl). I arranged for OSS and Dstl to establish a dialogue and within a matter of months, the 'wrapped rib' antenna project received development funding of £1m and could soon become a key technology in future satellites.

Championing Themes

We run two types of competitions; <u>'themed competitions'</u> where our defence and security stakeholders in Government, like the Home Office or MOD, have identified specific challenges, and we then help them to find and fund novel ideas or technologies to provide potential solutions. The second type is the <u>Open Call for Innovation</u> which accepts proposals for any innovation of potential benefit for Defence, and proposals for specific <u>focused areas</u> for Security. This is open year round.

For our themed competitions we have prior knowledge of what's coming up, but likewise for the Open Call, I know what 'interesting' looks like! I will look to share that information with innovators in my patch, letting them know what the latest themes are, and encourage engagement. A recent themed competition, Take Cover, which looks for innovations in deployable battlefield fortifications, resulted in two successful funding allocations for motorsport companies in my region, including Williams Advanced Engineering.

Open to ideas

DASA has invested £53.1m since December 2016 in cross government projects to develop and trial new capabilities for defence and security. And we want to invest more this year! I will be out and about in the next few weeks talking to existing and new contacts in my region about current and upcoming themed competitions in: countering drones, underwater autonomous vehicles, and bank note security; to name a few. We've also got a 'Space' competition, for which we're looking to fund advances in novel sensors, free-space optical communications, satellite protection systems and techniques for understanding the capability and intent of other satellites. I shall also be briefing on the focus areas for the Open Call, in particular, we're looking for innovations that could potentially benefit transport security.

So, if you think you have a great idea, get in touch and DASA will match you up with me if you're in my region or the Innovation Partner in your area accelerator@dstl.gov.uk

About Ben

Ben joined DASA as an Innovation Partner in April 2017. He has a Masters in Engineering Science from the University of Oxford and 14 years' experience working across Defence, having worked for the Defence Science and Technology Laboratory (Dstl), Defence Equipment & Support (DE&S) and central MOD. When not working, he's invariably either riding or tinkering with mountain bikes.