

KEEPING OUR NATION SAFE AND POWERING ITS PROSPERITY



Professor Sam Medhat
PhD MPhil CEng FIET FCI M FCI
FRSA FIKE FIoD
Chief Executive
Institute of Innovation & Knowledge Exchange
Visiting Professor of Innovation and Digital Transformation, University of Westminster

Back in 2019 the UK's Defence and Security Accelerator (DASA) started on their journey to achieve their Investor in Innovations ISO56002 Standard Accreditation - the UK's only standard benchmarking award in Innovation, provided by the Institute of Innovation and Knowledge Exchange. At the time, the leading science and technology agency had been in operation for just over three years, but even then it had a defined intention to stretch its strategic goals over the next three year to find and fund exploitable innovations that would eventually find their homes in the world of defence and security. In 2019, DASA had 446 projects, in 2020 that had risen, despite the pandemic, to 673, and in 2022/23 that number had risen beyond a thousand. Given its laser focus on innovation, and the fact that innovation is embedded within the DNA fabric of DASA, it's unsurprising that DASA achieved the highly coveted ranking of Best Practice in all six of the Investor in Innovations Standard categories, namely: Strategy and Alignment, Organisational Readiness, Core Capabilities, Technologies and IP, Industry Foresight, Customer Awareness and Impact and Value, following their review validation process in June 2023.

Achieving this substantial milestone demonstrates DASA's extraordinary capability in innovation that extends beyond its strategic imperative to find and fund exploitable innovations, into its people and culture; how it builds relationships with its stakeholders and how it manages its ecosystems of

customers and suppliers; reconfiguring its business model to drive innovation better; improving operational abilities including harnessing digital to make processes and practices more efficient and effective, and the way in which it assesses the impact and value of every project, supplier partner and customer engaged with, to ensure projects funded attain real impact and power up prosperity in the twelve UK regions represented.



Each of these areas are fundamental to building innovation strength, although many organisations tend to look at them in isolation, DASA, in contrast, has addressed them in concert, enabling a threading through of integration and interaction to support their strategic goals, and ultimately, spur a new wave of advancements and pioneering projects that will protect and safeguard the nation. However, alongside delivering the best innovations for the betterment of national security and defence, what mustn't be forgotten is DASA's fundamental role in powering UK prosperity, with over 50% of their projects'

funding (£103.2M) going to Small to Medium sized Enterprises (SMEs). From the initial funding model derived from the Chief Scientific Advisor science programme via Dstl, Defence Innovation Fund and Front Line Commands funds, DASA have launched new services, such as Defence Innovation Loans, the First Customer Fund, Defence and Security Seed Fund, as well as Regional Partnering Funds. All of which are powering forward tech-driven SMEs' growth and strengthening the UK's broader industrial base.

The prosperity drive and support for the small business tech community has been enabled greatly by DASA's Access to Mentoring and Finance (A2MF) Programme, supported by twelve regionally placed Innovation Partners who actively do the 'finding and funding' in their respective regions. They have an in-depth knowledge and understanding of their region, and are in regular contact with their business and academic prospect partners. As a result of this close engagement, DASA's network has grown significantly, with on average, 40% of proposals on each challenge call coming from new organisations. The A2MF team along with each of the Innovation Partners are dedicated to supporting and building business continuity and resilience in SMEs, and to helping small tech businesses who are successful in securing DASA challenge funds, leverage and attract further funding avenues and business development. A recent Small Business Research Initiative (SBRI) evaluation report – the initiative started in 2001, and

has, to date provided £788M to UK SMEs – showed that DASA funding had, in the time from its inception in 2016, represented 36% of the overall SBRI, and has supported over a third of all benefits highlighted, including those SBRI businesses leveraging £290M of private investment and experiencing 9% growth, compared to businesses not engaged in SBRI funding.

DASA lives and breathes impact and value across everything they do, and is the first organisation to have achieved Best Practice in this critical category in the Investor in Innovations Standard. Strong KPIs and impact metrics, particularly positive outcome responses from their customers – that extend not just in the MoD, but are in six other UK government departments including the Home Office and Department of Transport – show that DASA is enabling the right solutions to be found for their customers. Such a targeted ability is founded in DASA's in-depth connectivity to the science, engineering and technology community, both academic and industrial, with over four thousand organisations with accounts on their Marketplace portal, and over a thousand of these already engaged in challenge submissions. Such a growing ecosystem provides DASA with unprecedented access to the best minds, delivering the right solutions to meet the stringent desirability, viability and feasibility criteria to take an idea forward.

DASA underlines its dedication to fostering a forward-thinking environment where the ideas of tomorrow can take shape today. It achieves this through its Advisory and Foresight Group which continuously horizon scans, assesses markets and technologies, and aligns back into DASA's strategic imperatives. DASA's systematic and structured view of where it focuses its

innovation activities ensures that it can lead proactively, and anticipate future customer innovation needs. It is for this reason, why DASA has been able to support quickly such critical calls as the Defence Technology Exploitation Programme (DTEP) and the Security Open Call.

Creation of challenges both open and themed pertinent to present and future customer need, management of a growing and active ecosystem with a network of knowledgeable innovation partners, and access to different tiers of funding, have all been enabled by cultivating an innovation culture that constantly challenges the status quo, and isn't afraid to disrupt. In the light of this brave attitude, DASA started a Decuple programme (10 things to improve in DASA in 10 months) to strengthen Understanding, Team and Exploitation Pathways. Outputs of this work included the ground-breaking development of DASA's High Level Operating Model (HLOM), and its eventual mapping of the MoD and Industry Innovation Operating Model (MIIOM) into the HLOM, thus demonstrating its development had been in accordance with the principles of the MIIOM.

Having a world-class innovation accelerator like DASA delivers a number of profound gains to the UK's defence and security sector, such as:

1. A Catalyst for Novel

Defence Technologies: DASA's accreditation will stimulate the creation and adoption of a range of innovative solutions particularly those that are within the lower spectrum of technology readiness levels (TRL), leveraging its strong relationship with Dstl.

2. Enhanced Security

Innovations: By demonstrating best practice in the Investor in Innovations Validation

Assessment, DASA signifies its commitment to driving cutting-edge security solutions. These solutions exploit advances in artificial intelligence/ machine learning, biometrics, data security, and threat detection to ensure the country's safety and resilience against ever-evolving threats.

3. Greater Collaboration and

Partnerships: This recognition underscores DASA's role as an intelligent connector within the innovation ecosystem. As a result, partnerships with universities, tech-driven SMEs, and other stakeholders are likely to flourish even more, leading to an increased exploitation of innovative solutions across defence and security sectors.

4. Robust Support for

Innovative SMEs: DASA's accomplishment will bolster its mission to find, fund and nurture tech-driven SMEs that produce trailblazing solutions for the UK's defence and security. These SMEs will play a critical role in advancing the country's strategic interests, thereby enhancing national security and economic prosperity.

5. Promotion of a Pro-

Innovation Culture: The IKE Institute's award affirms DASA's commitment to an innovation-centric culture. This mindset will further stimulate the development and exploitation of novel technologies, encouraging a broader base of contributors and innovators.

DASA's Head, Anita Friend said: *"Earning the IKE Institute's Investor in Innovations ISO56002 Standard reinforces our resolve to spur innovation in defence and security. Our commitment to exploit advanced technologies will significantly boost the UK's capabilities in these critical sectors."*

DASA's achievement is not merely a feather in its cap, but a

strategic milestone that promises to transform the UK's defence and security sectors. The upcoming era of innovation promises to bring about advancements that fortify the UK's national security, enrich its economy, and cement its status as a global pioneer in defence and security innovations", DASA's Head added.

Professor Sam Medhat, IKE Institute CEO said: *"We have conducted a three-year longitudinal assessment and analysis of DASA's innovation strategy and its evolution over this period. Senior leading industrialists and academics with distinguished innovation track records formed the Verification and Validation Panel. DASA's scoring of Best Practice in all of the six categories of the Investor in Innovations has put them in a worldclass leading position within the innovation space. By earning the Investor in Innovations ISO56002 Standard, DASA has not only proven its commitment to fostering innovation, but has also demonstrated its role as a leader in enhancing the UK's security. We commend DASA's ongoing efforts to boost the country's prosperity through strategic investments and applaud their continued support for innovative initiatives."*

All of DASA's achievements documented in the Investor in Innovations illustrates their constant, unwavering dedication to deliver and enhance the UK's defence and security capabilities, as well as propelling economic growth, reinforcing our nation's prosperity through its regional economic engagement of innovative stakeholders, particularly small and medium enterprises and linking them to other top tier suppliers. Put simply, DASA is driven by innovation passion and it beats within the hearts of every person there. ■