

News story: Countering Drones: finding and neutralising small UAS threats



Swarm of Quadcopters Drones In The Air Over City, drones digitally modified

Background

The introduction of Unmanned Air Systems (UAS), often referred to as drones, has been one of the most significant technological advances of recent years and represents a shift in capability of potential adversaries. The threat from UAS has evolved rapidly and we are seeing the use of hostile improvised UAS threats in overseas theatres of operation. There is a similar problem in the UK with the malicious or accidental use of drones becoming a security challenge at events, affecting critical infrastructure and public establishments; including prisons and major UK airports.

Small commercially available UAS have already delivered direct impact effects and have allowed those hostile to UK interests to deploy cheap, pervasive, low observable surveillance capability. This threat often bypasses traditional air defence and ground security measures.

The UAS threat to UK national security is a cross-Government issue. There are many different UAS threats, each of which may require a different mitigation approach. The challenge will deepen with the predicted future advancement in UAS capability and as the civilian and military airspace becomes more crowded.

The Competition

This Defence and Security Accelerator (DASA) call aims to address the increasing UAS threat to the defence and security of UK both at home and abroad.

What are we looking for?

We are aiming to harness recent technology advances in a range of areas such

as sensing technologies, autonomy, Artificial Intelligence and non-lethal effectors to improve the ability of the UK defence and security community to counter an adversary's use of UAS. This needs to be achieved whilst preventing or minimising collateral damage.

We would like to focus on two key areas:

- Next generation counter-UAS (C-UAS)
- The future threats from UAS such as swarms, autonomy and congested air space

The solutions could include complete systems or components that deliver or enable:

- automated and networked sensing systems over wide and complex areas
- cost effective sensors
- Plug and play (e.g. SAPIENT) compliant integration (more detail will be provided in the full competition document)
- methods of robustly defeating or denying current and next generation drones in a range of scenarios and environments
- significant and rapid improvements to extant systems for deployment
- autonomous decision making
- signal processing to improve discrimination and identification
- networked approaches which may use existing sensing systems such as CCTV etc.
- ability to identify and track the UAS operator
- airborne, mobile or expendable solutions

What we are not looking for

- manpower intensive detect, track and identification solutions
- standard barrage jamming
- highly bespoke, closed or crude integration
- low potential for cost efficiency

The competition is envisaged to have a number of phases; Phase 1 of this competition is intended to demonstrate proof of concepts that can be further developed and integrated during later phases. Successful projects in this first phase may be encouraged to work with other suppliers in future phases in order to integrate solutions into a deployable system, and it is hoped successful projects will be able to be demonstrated at key showcasing events in 2020.

Competition key information

The total funding for this competition is expected to be at least £2M, split over multiple phases. The total funding for Phase 1 is expected to be at least £800K.

This DASA competition is currently planned to open in April 2019 when the full document will be released on our website. Proposals must be submitted to the [DASA submission service](#), for which you will have to register.

News story: UK and Oman sign historic Joint Defence Agreement

Defence Secretary Gavin Williamson has travelled to Oman to sign the agreement, alongside their Minister Responsible for Defence Affairs, Badr Bin Saud Bin Harib Al Busaidi.

Defence Secretary Gavin Williamson said:

It is a pleasure to sign this agreement, bringing us even closer to one of our most important partners. This is an historic landmark moment between our two nations and is a significant reinforcement of our mutual security.

Gulf security is our security, and it is crucial that we expand our horizons and become a truly global Britain after we leave the European Union.

The JDA follows the culmination of Exercise Saif Sareea 3, which was held in Oman during October and November 2018. It was the largest exercise by the UK's military since Saif Sareea 2, 17 years previously, with 5,500 troops travelling to Oman to display their land, air and sea capabilities. The JDA provides a launch pad to deepen defence co-operation, with both nations working together to develop capabilities and promote regional stability.

The UK and Oman have a long-standing and historic relationship, dating back more than 200 years. More recently, the British Joint Logistics Support Base in Duqm opened last year and the Defence Secretary announced during his visit to Saif Sareea 3 that a new joint military training area will be established in the country this year. The UK is committed to the development of Duqm Port and this is part of the UK's defence commitment to the region to ensure that our operations are agile. Additionally the new Omani-British Joint Training Area will ensure the UK is building a world-class military force alongside Omani counterparts, building on our joint learning from Saif Sareea 3.

The Agreement will ensure that these facilities are available for use long into the future, allowing the UK to maintain a presence in the Region. This includes a new Naval Support Facility in Bahrain and our ongoing cooperation at Al Udeid in Qatar.

It also builds on the Prime Minister's commitment to the Freedom of Navigation, economic stability and security in the Gulf.

The Ministry of Defence is committed to spending £3 billion across the Gulf over the next 10 years.

His Excellency Sayyid Bader bin Saud bin Harib Al-Busaidi, the Omani Minister Responsible for Defence Affairs said:

This agreement culminates the efforts of both countries' leaderships to enhance the existing bilateral cooperation and the strategic partnership between them. It is a milestone in the history of both nations.

The signing of this agreement today reaffirms the importance of optimizing the joint military efforts to ensure the security and stability of both friendly countries and pave the way for more cooperation in the field of defence and joint exercises in pursuance of the agreement objectives.

News story: National Museums Liverpool Board Appointments

Sarah Dean

Sarah is Head of Tax and Investments at the Grosvenor Estate Family Office, where she leads provision of effective tax, investments and governance services. Sarah is also responsible for leading examination of organisational risk at the Grosvenor Estate, and Chairs the Family Office Risk Committee. Educated in Wirral, Sarah studied for her degree at Manchester University Business School. Joining PwC in 1999, Sarah qualified as a Chartered Tax Advisor and gained a breadth of experience in advising clients in individual, corporate and international taxation, primarily in the consumer and industrial products sector. Sarah is an alumnus of the Institute of Management Development (IMD) in Switzerland and an Affiliate member of the Society of Trust & Estate Practitioners (STEP). Involved in volunteering, in various capacities, for over fifteen years, Sarah is presently Chair of Governors at a Chester primary school. Sarah lives in rural North Wales with her husband and three children.

David Fleming

David Fleming is the Chief Technology Officer at Mitigo, a cyber security company based in the North West. He spent the majority of the past decade at the heart of the digital transformation of UK Banking. As Head of Digital Banking at the Lloyds Banking Group he grew their digital customer base to over 10 million active users whilst defining the transformation roadmap for Lloyds, Halifax and Bank of Scotland brands. He was also accountable for the re-launch of the TSB digital bank, when it was floated out of the group 2012.

In 2014 David moved to be part of the turnaround team at the Co-operative Bank as Digital Director and Transformation & Strategy Director. He lives in Cheshire with wife Sarah and their 3 children.

Max Steinberg

Max was appointed Chief Executive of Liverpool Vision in July 2010. On joining Liverpool Vision, Max oversaw Liverpool's award winning six-month participation in the World EXPO Shanghai 2010, a six-month global event based around the theme of 'better city, better life' which culminated in the Liverpool Gala Day on 16 October 2010. Max has overseen the enhancement of Liverpool Vision's business growth service, expansion of Liverpool Vision's work in key international markets and the creation of Marketing Liverpool. Max was instrumental in securing the first International Festival for Business 2014 which was held in Liverpool and had overall responsibility for the organisation and delivery of the Festival. He was Chair of the Festival and Executive Steering Group in 2014 and 2016 and is now chairing the 2018 Festival. Max began his career at Liverpool City Council in 1975 before moving to the Housing Corporation where he spent 25 years working in all aspects of housing, before becoming Chief Executive of Elevate East Lancashire in 2003. In 2009 he became Chief Executive of Regenerate Pennine Lancashire Ltd.

Max was on the Board of Liverpool John Moores University European Institute of Urban Affairs from 1992 and was its chairman until 2013. He is Chair of the Riverside Housing Group and was a non-executive director of Kensington Regeneration from 2003-2006. Max was appointed Chairman of the Roy Castle Foundation in August 2015 and has recently become a Board Member of the following: The Advisory Board for International Business and Diplomatic Exchange (IBDE), the Great Exhibition in the North and Shakespeare in the North. He was awarded a Senior Fellowship at Liverpool Hope University. In 2011 Max was awarded the OBE in 1997 for services to Housing and Regeneration on Merseyside and was awarded the CBE for services to Business and the Community in the June 2013 Birthday Honours List.

These roles are not remunerated. These appointments have been made in accordance with the [Cabinet Office's Governance Code on Public Appointments](#). The process is regulated by the Commissioner for Public Appointments. The Government's Governance Code requires that any significant political activity undertaken by an appointee in the last five years is declared. This is defined as including holding office, public speaking, making a recordable donation or candidature for election. Sarah Dean, David Fleming and Max Steinberg have made no such declarations.

News story: Royal Museums Greenwich Board Reappointments

Admiral Sir Mark Stanhope

Admiral Sir Mark Stanhope retired from the Royal Navy in April 2013 after 43 years of service. He was the First Sea Lord and Chief of Naval Staff for nearly 4 years, which was the culmination of a career that included command of submarines HMS Orpheus and HMS Splendid, the frigate HMS London and the aircraft carrier HMS Illustrious. He has had a number of appointments in NATO including working in the USA as a Deputy Supreme Commander. He is now the President of the Marine Society and Sea Cadets, a member of the Council of Management of the White Ensign Association and holds a number of other maritime related charitable positions.

Jeremy Penn

Jeremy Penn has been a Trustee of RMG since 2015 and a Trustee of the Marine Society and Sea Cadets (MSSC) since 2017 and serves on the Board of Advisors for London International Shipping Week 2019 (LISW), having chaired the Steering Group for LISW 2015 and 2017. He is also a Trustee of a defined benefit pension plan. He was Chief Executive of the Baltic Exchange from 2004 to 2016. Prior to that he worked for 20 years at Reuters Group PLC in a range of positions specialising in technology and marketing related to financial information as well as general management. He has lived and worked in France, Zimbabwe, Morocco, Hong Kong, Australia, Singapore and the USA as well as the UK. He was educated at Warwick School and Corpus Christi College, Oxford and later took the Advanced Management Programme at Harvard Business School.

These roles are not remunerated. These reappointments have been made in accordance with the [Cabinet Office's Governance Code on Public Appointments](#). The process is regulated by the Commissioner for Public Appointments. The Government's Governance Code requires that any significant political activity undertaken by an appointee in the last five years is declared. This is defined as including holding office, public speaking, making a recordable donation or candidature for election. Admiral Sir Mark Stanhope and Jeremy Penn have made no such declarations.

News story: National Nature Reserves offer £36 million of benefits to

society

New [research](#) published highlights that National Nature Reserves (NNRs) managed by Natural England offer huge value for money, with a wide range of economic, environmental and societal benefits totalling £36 million.

Our NNRs are some of the most important sites for wildlife and geology in England. They conserve biodiversity and geodiversity, provide an outdoor space for education, learning and research, and opportunities to access, enjoy and engage with our natural heritage, championed within the Government's 25 Year Environment Plan.

A new Natural Capital Accounts report published today provides an innovative insight into the health of our NNRs as natural assets, as well as demonstrating the ecosystem services, benefits and value they provide to society in one extended balance sheet. The report will provide a new perspective to inform investment and management decisions around NNRs.

The report shows the most significant benefits provided by our NNRs are wildlife, positive cultural impacts, and climate change reduction through carbon sequestration. The report estimates that the 141 NNRs managed by Natural England will remove up to 185,000 tonnes of carbon dioxide equivalent per year from our atmosphere providing an annual benefit of approximately £12 million. NNRs are an important recreational resource, attracting an estimated 5.5 million visits a year. NNRs do not charge for access so these visits represent free recreational experiences which we estimate are worth £22 million per year.

Other benefits of NNRs, such as wildlife and health improvement, and water quality and pollination, are also highlighted in the report, although we are not yet able to place a monetary value on them.

Tim Hill, Chief Scientist at Natural England said:

National Nature Reserves are the crown jewels of our natural heritage, important natural capital assets that need to be understood to ensure they are resilient so we can continue to provide environmental, societal and economic benefits for generations to come.

I believe that these accounts demonstrate not only how important National Nature Reserves are, but also how a more inclusive approach to natural capital accounting is essential if we are to invest in, and manage, our natural capital for the full suite of benefits that they offer.

Natural Capital Accounting organises the available evidence, quantifying and expressing NNRs in monetary terms where possible, demonstrating the benefits of investment. Like other assets, the NNRs will continue to provide benefits

if they are maintained and invested in.

Natural Capital Accounting is an experimental accounting method which has been used by the Environment Agency, Forest Enterprise and the Royal Society for the Protection of Birds.