

Innovation call for technology to stop armed or violent offenders

The [Defence and Security Accelerator \(DASA\)](#) has today launched an innovation competition to develop new capabilities for police and law enforcement agencies to stop armed or violent offenders with the minimal necessary force from distance.

[Advancing Less Lethal Weapons](#) seeks proposals for innovative technologies from industry and academia that can temporarily stop a violent or armed subject to prevent the escalation of conflict or destruction of property.

The technologies would allow the use of less lethal means as an alternative to firearms in some scenarios, giving police more versatile and effective options to defuse dangerous situations to keep the public safe without having to resort to lethal force.

An initial £500,000 funding is available for innovators with up to £500,000 additional funding for a later phase.

The scope of this competition, run on behalf of the [Home Office](#), includes looking at technologies that have not been deployed operationally before and investigating combinations of technologies that may provide better solutions.

The proposed technologies would need to reach a distance of 50m to meet the police requirement while up to 70m could also meet potential military requirements.

The ability to mark a subject in order to 'identify' them at a later stage would also be desirable.

There are two tracks to the competition looking at:

Full details of scope and tracks can be found in the [competition document](#).

The competition closes for submissions at midday BST on Thursday 15 October 2020.

This funded call follows on from a [market exploration](#) which was conducted by DASA on behalf of the Home Office and police late last year.

The previous call focused on near market and mature solutions for similar policing problems. In contrast, this call is looking for technologies at technical readiness levels (TRL) levels between 3 and 7.

A dial-in session providing further detail on the competition and a chance to ask questions in an open forum. If you would like to participate, please register on the [Eventbrite page](#).

A series of 20 minute one-to-one teleconference sessions, giving you the

opportunity to ask specific questions will take place on [9 September](#) and [24 September](#). If you would like to participate, please register on the Eventbrite page.

British experts help Mauritius protect coral reefs from oil spill

The UK Government has sent three British ecology experts and one marine legal expert to Mauritius to support the next phase of the country's response to a devastating oil spill, after a ship containing 4,000 litres of fuel ran aground and broke up near environmentally protected coral reefs.

The scientists, from the UK's Centre for Environment, Fisheries and Aquaculture Science (Cefas) and funded by UK aid, flew from the UK on Wednesday evening (19 August) at the request of the Mauritian Government.

The ecology experts will assess the scale of the damage and help the African island to identify the best ways to restore its coastline and protect the thousands of animal species now at risk of oil pollution. They will work with local experts and communities to achieve this.

On top of that, a package of legal and technical advice will be provided on how to safely dispose of the stricken ship with a marine expert deploying to the scene, supported by a team of lawyers and marine consultants working remotely from the UK.

The UK has also committed £10,000 of new emergency support for the Mauritius Wildlife Fund to support its urgent work to help the local nature reserves directly impacted by the oil spill.

Mauritius is a biodiversity hot spot with a high concentration of plants and animals unique to the region. The oil spill has caused significant damage near two protected marine ecosystems. The British scientists will advise on how to minimise damage to the unique coral reefs and how to protect them against future threats.

The incident could affect the island's tourism industry, already impacted by the coronavirus pandemic. Other scientists have deemed the oil spill as the country's worst ecological disaster.

UK Minister for Africa James Duddridge said:

Without action, the devastating oil spill in Mauritius risks causing enormous damage to the environment and suffering to the fishing communities who rely on the coast for food and income.

I'm proud that the UK is sending experts who will play an important role in assessing the damage, supporting local communities and protecting the environment for future generations.

We will continue to work closely with Mauritius, as a friend and Commonwealth partner, to help them recover quickly from this national emergency.

The Department for International Development (DFID), The Foreign and Commonwealth Office (FCO) and The Department for Environmental and Rural Affairs (DEFRA) are working with Cefas, a world-leading UK Government agency specialising in marine science and technology, to urgently respond to the request for assistance from Mauritius.

A British oil spill expert, in consultation with the International Maritime Organisation, has been on the ground in Mauritius since the beginning of the crisis, supporting the United Nations team to advise the local authorities on how to limit the environmental damage.

Senior marine monitoring scientist at Cefas, Dr Sue Ware, who is going to help in Mauritius said:

We have been observing the oil spill in Mauritius closely and will be offering our support to assist in environmental impact assessment and monitoring to help tackle the pollution – thereby, helping protect livelihoods, the environment and marine life.

We will work closely with the expert team on the ground, and our colleagues back in the UK laboratory, to apply our experience in marine emergency response to the situation.

Note to editors:

- The Centre for Environment, Fisheries and Aquaculture Science (Cefas) is a world leader in marine science and technology, providing innovative solutions for the aquatic environment, biodiversity and food security. Cefas is an Executive Agency of Defra and the UK's most diverse centre for applied marine and freshwater science and research. For more information about Cefas visit www.cefasc.co.uk and follow @CefasGovUK

Action agreed to support students into preferred universities

The Government and higher education sector have together agreed that all

students who achieved the required grades will be offered a place at their first choice university.

Yesterday's (19 August) daily meeting of the Government's Higher Education Taskforce agreed to honouring all offers across courses to students who meet their conditions this coming year wherever possible, or if maximum capacity is reached to offer an alternative course or a deferred place.

To support this commitment, the Government has lifted the cap on domestic medicine, dentistry, veterinary science and undergraduate teacher training places. Additional teaching grant funding will also be provided to increase capacity in medical, nursing, STEM and other high-cost subjects which are vital to the country's social needs and economy.

Universities Minister Michelle Donelan said:

This has been an incredibly difficult time for students and I want to reassure them that every effort is being made to make sure all those who planned to, can move on to higher education.

I am delighted that the Government and the higher education sector have agreed that all students who achieved the required grades will be offered a place at their first choice university. I want universities to do all they can to take them on this year or offer alternative courses or deferred places where required.

This pandemic has highlighted more than ever the importance of our fantastic healthcare services and the need to invest in them. So I am pleased we are removing the cap on these courses and providing additional funding so more students can take up their places now and become our future doctors and healthcare professionals.

We're working closely with universities to support them, helping them to be flexible for students.

This year many more students have been successful in meeting the required grades to study medicine, dentistry, and veterinary science, and the Government has removed the caps to ensure a supply of students to these courses, which are especially important during the global pandemic.

Lifting the domestic cap on these subjects means if students have met their offer to study at a medical school they should be able to take up that place this year where there is capacity, or be offered a deferred place at their chosen university or higher education provider and course.

There are no Government caps on university nursing places, and the Government is working rapidly to build capacity in the nursing sector to support recruitment to the country's vital public services.

On Monday, the Government also confirmed it intends to remove temporary student number controls for the 2020/21 academic year to build capacity to

admit students this coming year.

The Universities Minister is sending out a message to students today offering reassurance that the Government is working with the sector to make sure those who planned to, can go to university and set out advice for them.

If a student receives a centre assessment grade which meets the conditions of their original offer, they should get in touch with their preferred university to discuss what options are available. Students can 'self-release' through UCAS from their existing offer and accept a new offer at their preferred university.

Schools and colleges received students' revised A and AS level grades yesterday and by the end of the week UCAS aims to share these grades with higher education providers, meaning students can start contacting their previous preferred university if they wish to do so.

The Higher Education Taskforce includes UCAS, the Office for Students (OfS), Universities UK, Guild HE, the Russell Group, Universities Alliance, and Million Plus among other groups.

[Innovate UK launches four-year design strategy](#)

The UK's innovation agency, Innovate UK, today publishes a strategy that seeks to encourage and support excellent design in innovation. The document, ['Design in Innovation strategy, 2020-2024'](#), recognises that the UK is a world-leader in design excellence and there are great opportunities for business to realise more value by tapping into that capability and embedding design within their processes and culture.

Yet there are barriers to progress, it is not good enough for an idea to be technically feasible, it must also be desirable and fit-for-purpose. To address this, Innovate UK will launch a programme that will meet business need under four themes:

- Making the case for investment in design
- Reducing the cost of entry for those new to design
- Helping businesses access the best design talent
- Helping businesses maximise the value contribution of design

The programme will include grant funding opportunities for human-centred design activity as well as broader initiatives, which will be assessed against success criteria in order to deliver value. Innovate UK will work with industry partners and across government to fully embed design in innovation, to ensure the UK's world-class designers maximise their

contribution to sustainable economic growth.

In the foreword to the strategy, Dr Ian Campbell, Executive Chair, Innovate UK writes:

“Over the last five years, our programmes of investment and support for design have produced impressive results. However, more can be done – despite the UK’s enormous strengths in design, there remains a significant opportunity for more businesses to exploit that potential: recognising, adopting and investing in the best quality design to innovate more effectively, compete successfully and grow faster.

“As this strategy demonstrates, for those businesses and organisations that truly embed design into their innovation processes and strategies, the potential benefits are considerable.”

The strategy outlines four ways that good design boosts businesses and the economy, by:

- Delivering more valuable outcomes
- Reducing innovation risk
- Accelerating scale-up
- Improving business performance

This is backed by evidence. Long-term studies by McKinsey and the Design Management Institute (DMI) have compared the performance of businesses with strong design capability against that of their peers. This shows that businesses that used design best, outperformed their peers by around 200% in terms of revenue and shareholder returns.

Innovation is not only about having ideas, it is about creating value from those ideas. If the economic, social and environmental benefits are to be realised, then it is essential that those ideas are readily adopted and used by people. Technology enables supply, but people determine demand. Successful innovation requires both to be aligned, and it is here that great design, as the interface between people and technology, is crucial.

We are all familiar with new ideas that promise much, but fail to deliver because they are difficult to use, are unappealing or even stigmatising – remember the Sinclair C5? On the other hand, we will happily pay a premium for goods and services that are appealing and useful.

For example, with the original iPod – people did not buy it because of the clever technology inside, they bought it because of the benefit – “your entire CD collection in your pocket” – and kept buying Apple products and services – often at a premium – because of the delightful, frustration-free ownership experience.

Dr Campbell added:

“Innovate UK is at the forefront of the government’s commitment to increase public and private investment in R&D activities. By ensuring that this is integrated with design, the likelihood of success will increase, boosting the

return on our own investments and helping to bring wider, long-term outcomes for the whole country. In short, design creates value.”

Notes for editors

You can download the strategy here:

[Innovate UK Design Strategy](#) (PDF, 6.59MB, 23 pages)

And find further support and guidance on design in innovation through the [Knowledge Transfer Network](#).

About Innovate UK

Innovate UK is part of UK Research and Innovation, a non-departmental public body funded by a grant-in-aid from the UK government. For more information, visit the UK Research and Innovation website. We drive productivity and economic growth by supporting businesses to develop and realise the potential of new ideas, including those from the UK’s world-class research base.

For further information

PJ Taylor, Senior Media and Communications Manager: 07950 225001. For out of hours media calls: 01793 298902 / press@ukri.org

[AAIB Report: Airbus A320-216, Aircraft descended during go-around](#)

News story

An Airbus A320-216 (EC-KLT) made two approaches above the correct descent profile, on each occasion leading to a missed approach, 26 August 2019.



The aircraft, an Airbus A320-216 (EC-KLT) made two approaches above the correct descent profile, on each occasion leading to a missed approach. On the second missed approach the aircraft initially continued descending and was not configured appropriately, reaching an angle of attack at which the alpha floor¹ energy protection mode activated to increase engine thrust.

The aircraft made a subsequent approach, landing without further incident. During a subsequent event, involving the same operator and aircraft type (but different flight crew), the aircraft remained above the correct approach descent profile initially but descended below it later in the approach and performed a missed approach. The pilots in this case managed the vertical profile manually using a flight control mode with which they were not familiar.

In both cases the pilots appeared not to have understood when to commence the final descent to follow the vertical profile of the approach. The operator's safety department has recommended improvements in approach training and strategies to assist situational awareness. The operator and air traffic services provider are working to gain a better understanding of each other's approach requirements.

[Read the report.](#)

Media enquiries call: 01932 440015.

Published 20 August 2020